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JUNE 14, 1919

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“SILVER CHURN” Dairy Preparations

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Advances in

TRADE MARK
A.D. 1715.

Pharmacy

Bacteriological Peptone.

IDENTIFICATION

“EUPEPTON”

TRADE MARK

Brand.

“Eupepton” Bacteriological Peptone is specially manufactured for use as a nutritive medium, and is employed in most of the large laboratories.

It has been officially adopted by the War Office and by the British Disinfectant Manufacturer's Association for use in place of Witte's Peptone.

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BONE HANDLES.

No.	rows.	Description.	per doz.
79	4	Cemented backs, extra super, drawn silvered wire	21/0
547	4	Trepanned , hygienic, bold handles, fine bristles... ..	17/0
522	4	Waxed backs, assorted patterns and stiffnesses	16/6
479	3	Waxed backs, perforated, large heads, tufted "penetrator"	16/6
676	4	Waxed backs, hygienic, perforated, straight cut	15/0
690	4	Waxed backs, assorted patterns, bold handles, super	15/0
648	4	Trepanned backs, including waxed backs, assorted patterns	12/9
689	4	Waxed backs, assorted patterns	12/6
527	4	Waxed, Trepanned, &c. , assorted styles, including carved handles	12/0
578	4	Trepanned backs, hygienic... ..	11/6
622	3	Waxed backs, serrated, with hole to hang.	11/0
650	4	Waxed backs, assorted patterns	11/0
654	4	Trepanned backs, bold handles	10/6
587	4	Trepanned backs, assorted patterns, carved, &c.... ..	10/6
588	4	Waxed backs, assorted patterns	10/0
559	4	Trepanned backs	9/0
656	3	Trepanned backs, prophylactic pattern	9/0
590	4	Trepanned backs, assorted patterns, carved handles	8/6
621	3	Trepanned backs, prophylactic pattern	8/0
537	4	Trepanned backs, hygienic... ..	8/0
591	3	Waxed backs, assorted patterns, carved handles	7/6
624	4	Trepanned backs assorted patterns and styles	4/6

CELLULOID HANDLES.

No.	rows.	Description.	per doz.
561	4	Celluloid backs, assorted patterns	16/0
562	4	Celluloid backs, head shaped	15/0
563	4	Celluloid backs, serrated, fine bristles	14/0
652	4	Celluloid backs, white imitation ivory, prophylactic, fine white bristles... ..	14/0
647	4	Celluloid backs, assorted coloured handles, assorted patterns and cuts	12/9
653	4	Celluloid backs, prophylactic, with hole to hang, fine bristles	12/6
558	4	Celluloid backs, "extra fine quality"	9/6
566	4	Celluloid backs, assorted patterns	9/6
655	4	Celluloid backs	9/0
555	3	Celluloid backs, prophylactic pattern "Sanitary"	9/0
589	3	Celluloid backs, prophylactic pattern, with hole to hang... ..	9/0
657	3	Celluloid backs, prophylactic, assorted, white, ivory and amber	8/6
592	3	Celluloid backs, small size	7/6
564	4	Celluloid backs	6/6
581	4	Celluloid backs, assorted, serrated, etc., "superfine quality"	6/6
556	4	Celluloid backs, "extra fine quality"	6/0
580	4	Celluloid backs	6/0

CHILDREN'S.

No.	rows.	Description.	per doz.
87	3	Bone backs, Waxed, assorted, small size	8/6
536	3	Bone backs, Trepanned, assorted patterns	9/6
574	4	Bone handles, Trepanned, assorted patterns... ..	4/9
645	3	Bone backs, hygienic	4/6
646	3	Celluloid backs, assorted patterns	4/6

MAY, ROBERTS & CO., LTD., 7-13 CLERKENWELL ROAD, E.C. 1.
And at 16 Westmoreland St., Dublin.

THEN *and* NOW

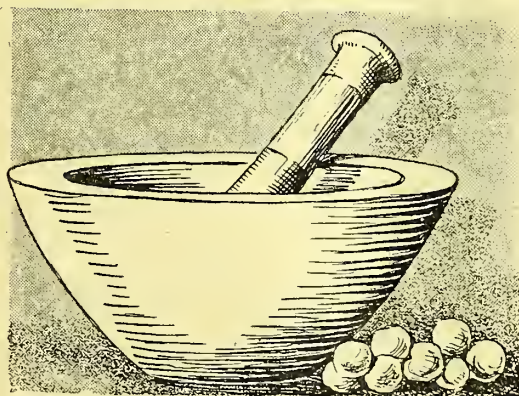


IN 1839 goods were distributed mainly by coach and horses. Telephones, telegrams and fast trains were not yet thought of. But primitive though transport facilities were, Chemists and Druggists of London and the Southern Counties used regularly to send their orders to the enterprising inventor of the coated pill.

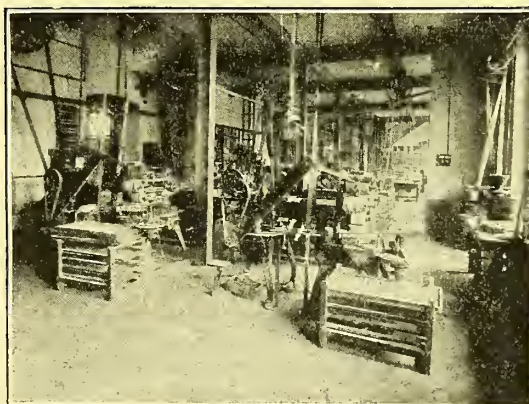


IN contrast to the slow methods of delivery available in 1839 it is interesting to record that a consignment of Pills, manufactured by Arthur H. Cox & Co., Ltd., was during the war delivered by one of the fastest aeroplanes to the brave men shut away in Kut-el-Amara.

"TIMES change, and we with Time." To-day the dependable manufactures of Arthur H. Cox & Co., Ltd., are sought by Chemists throughout Great Britain, the Colonies and all foreign countries, and large deliveries go forward daily by every modern means of rapid transport.



IN 1839 the old-fashioned bolus—the only pill known at that period—was made with difficulty, being generally massed in an iron mortar. Each pill so made was weighed and shaped by hand, and to make 100 or so was considered a good day's work.



TO-DAY the output of Pills from a battery of machines such as is shown in the accompanying illustration is never less than 2,000,000 daily. The Pills so made are noted for their accuracy of dosage, high polish, beautiful colour and regular shape. From first to last no hand touches the modern made Pill.

Some of the present-day packages of ARTHUR H. COX & CO., LTD. BRIGHTON



6/- per dozen.

OF the many hundreds of packages now put up by Arthur H. Cox & Co., Ltd., it is only possible to illustrate the merest few here. Those reproduced give a general idea of the attractive appearance of the packages but suggest nothing of their artistic excellence and brilliant colouring.

A point worthy of special note by the Chemist is that Arthur H. Cox & Co., Ltd., maintain a special department at their works charged with assisting the retailer to sell the goods with which he is supplied. The goods are GOOD and sell well on their own merits—as they have done ever since the firm was founded. But the retail Chemist to-day has to meet an ever-increasing competition, and Arthur H. Cox & Co., Ltd., are helping him to cope with it not alone in the quality and get-up of their manufactures but in the methods of displaying and advertising them.



20/- per gross.



7/- per dozen.

Some of the present-day packages of ARTHUR H. COX & CO., LTD. BRIGHTON



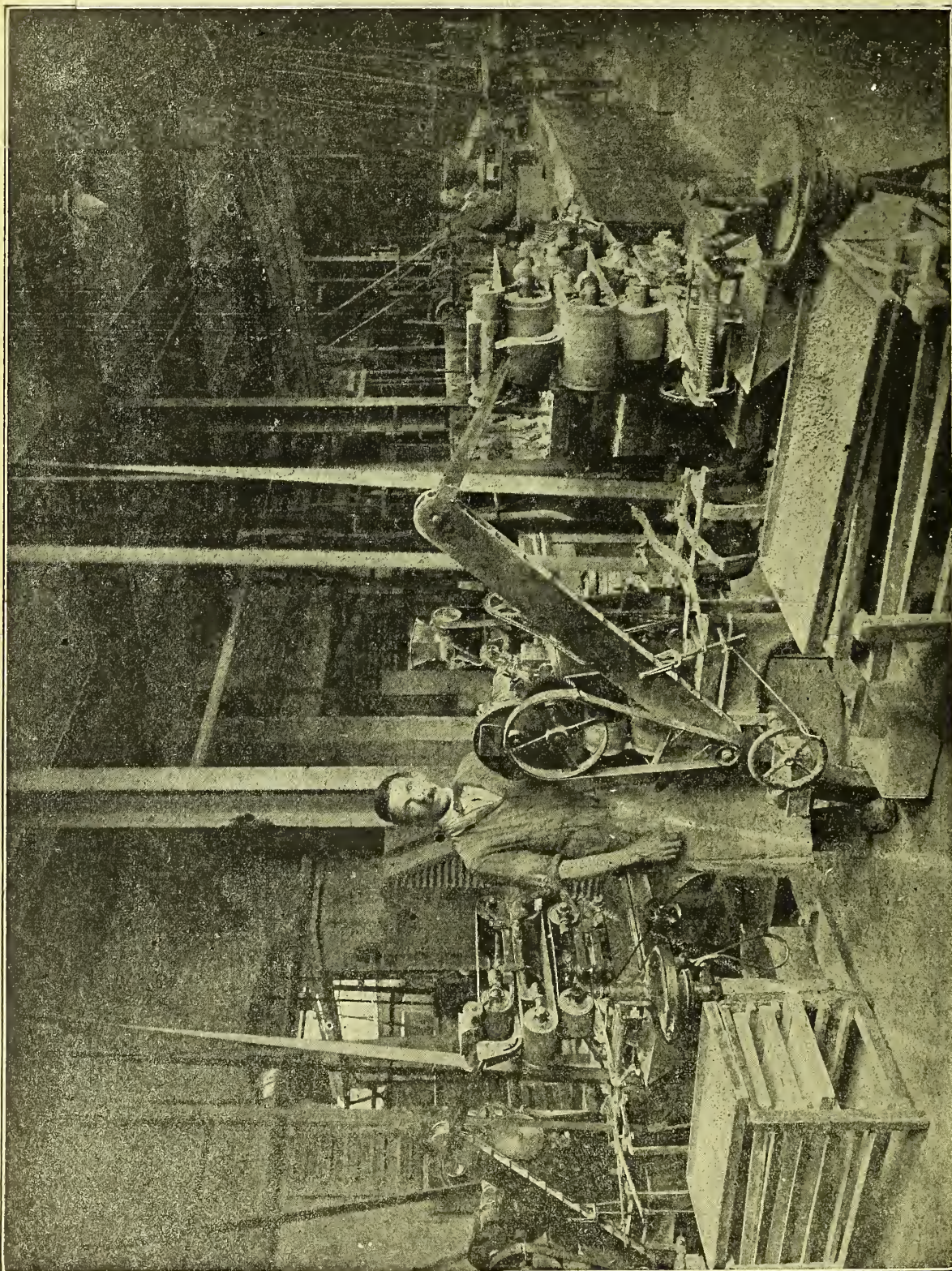
51/- per gross tubes.



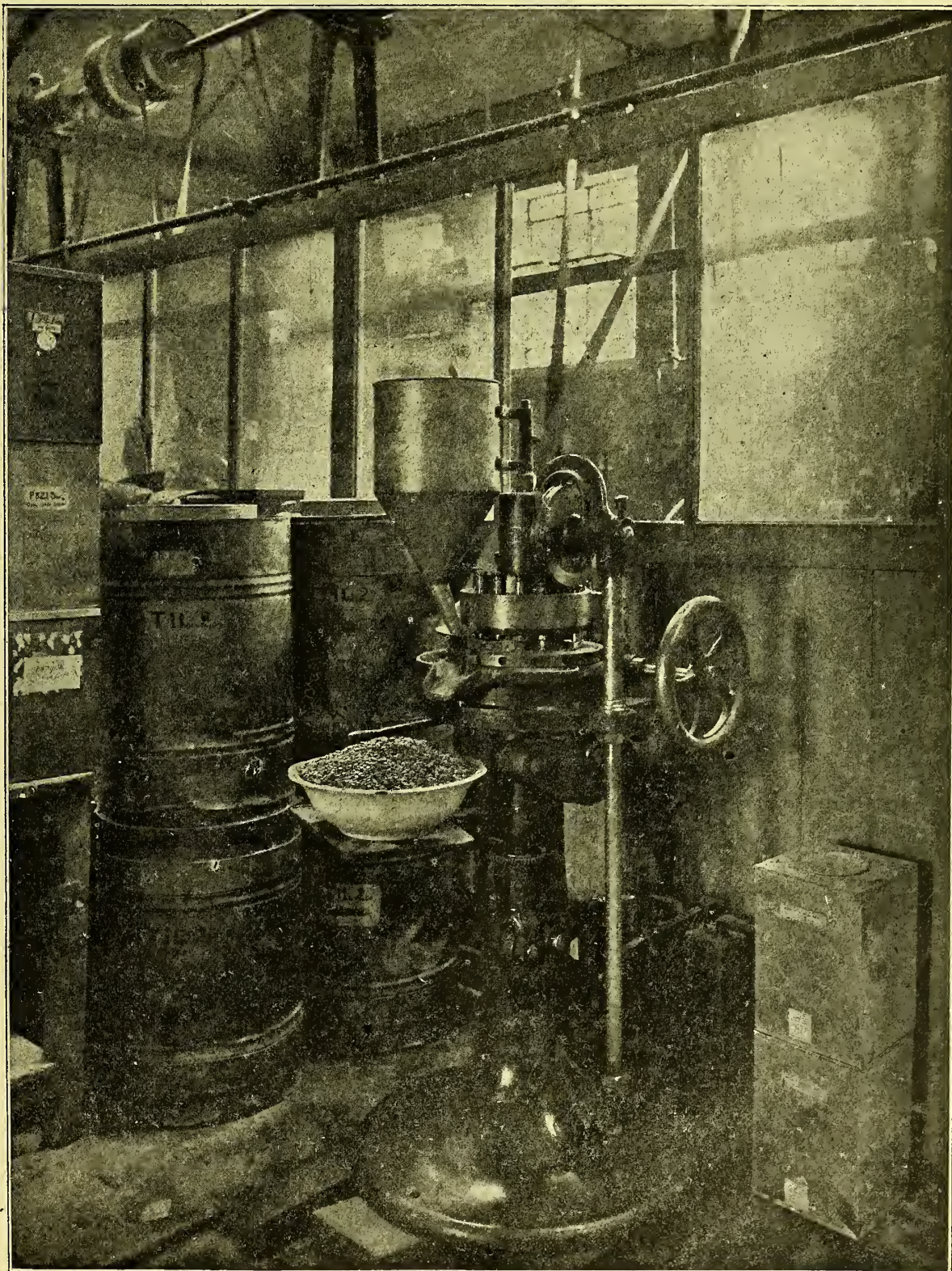
4/6 per dozen.



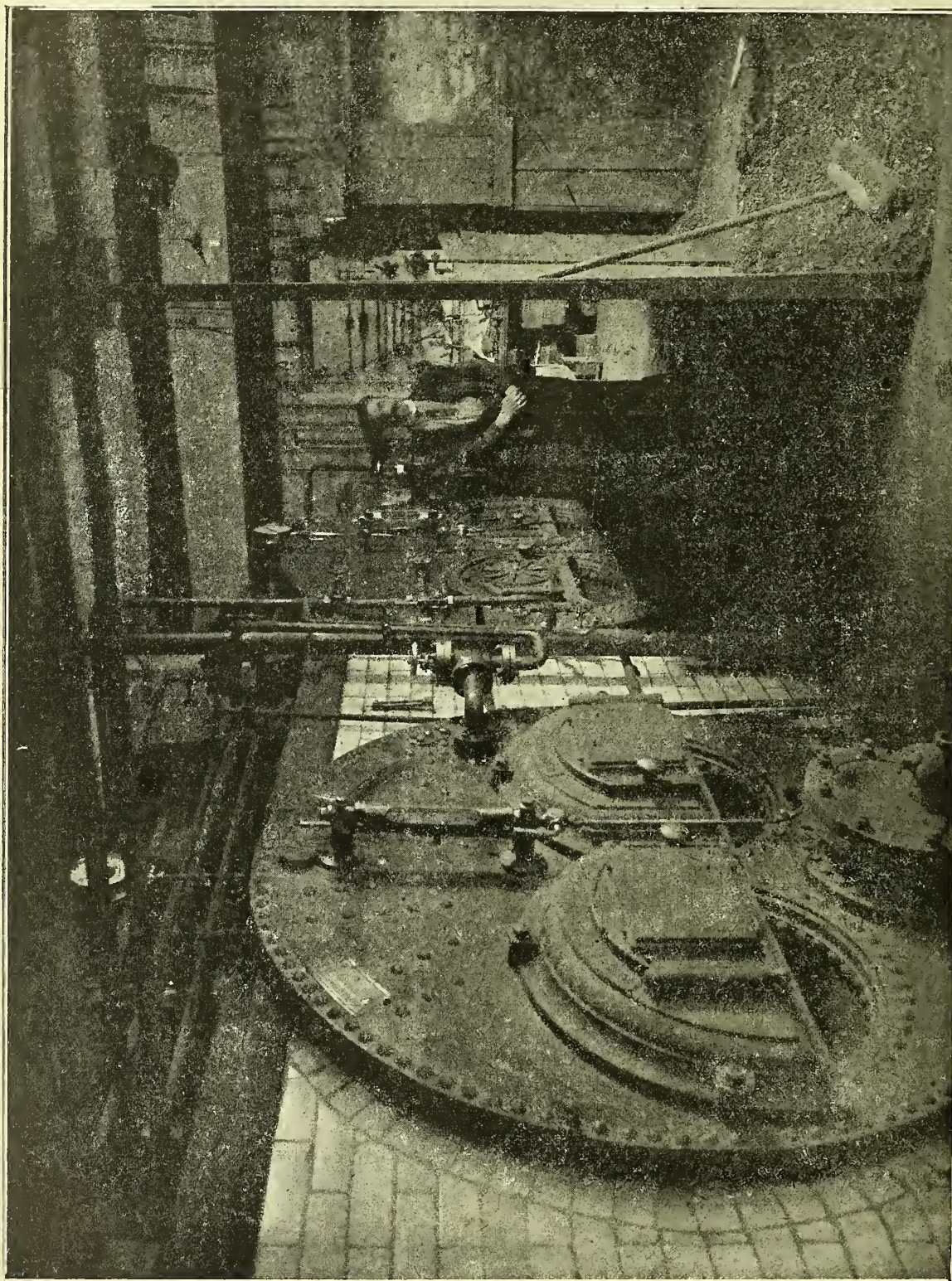
5/- per dozen



Two of the smaller pill machines used during the war exclusively for Government work. It was on these machines that the opium pills were made which were delivered to Ku. el-Amara (then a beleaguered fortress) by aeroplane.—*Vide* Government report.



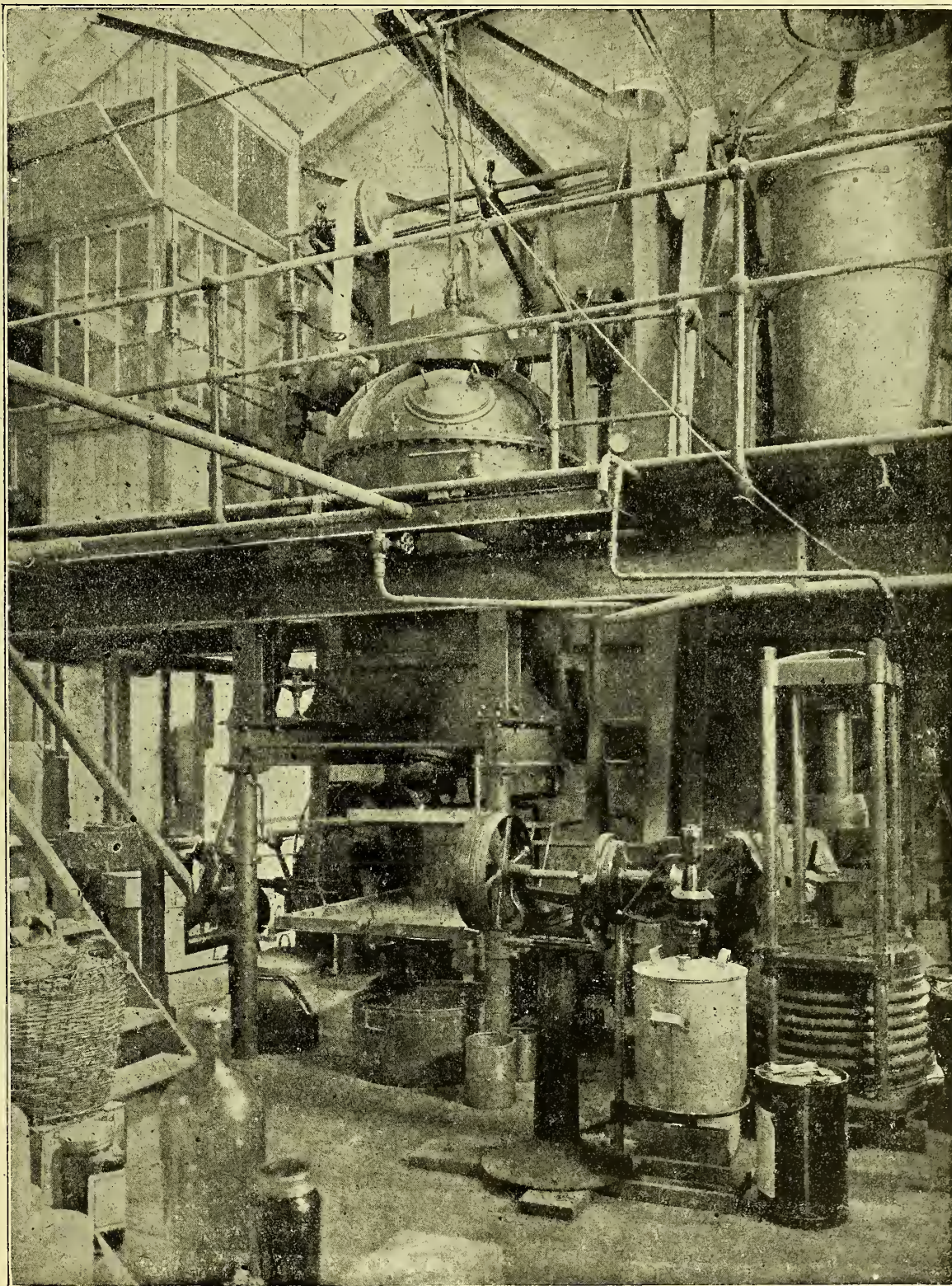
AN ORDINARY ROTARY TABLET COMPRESSING MACHINE.



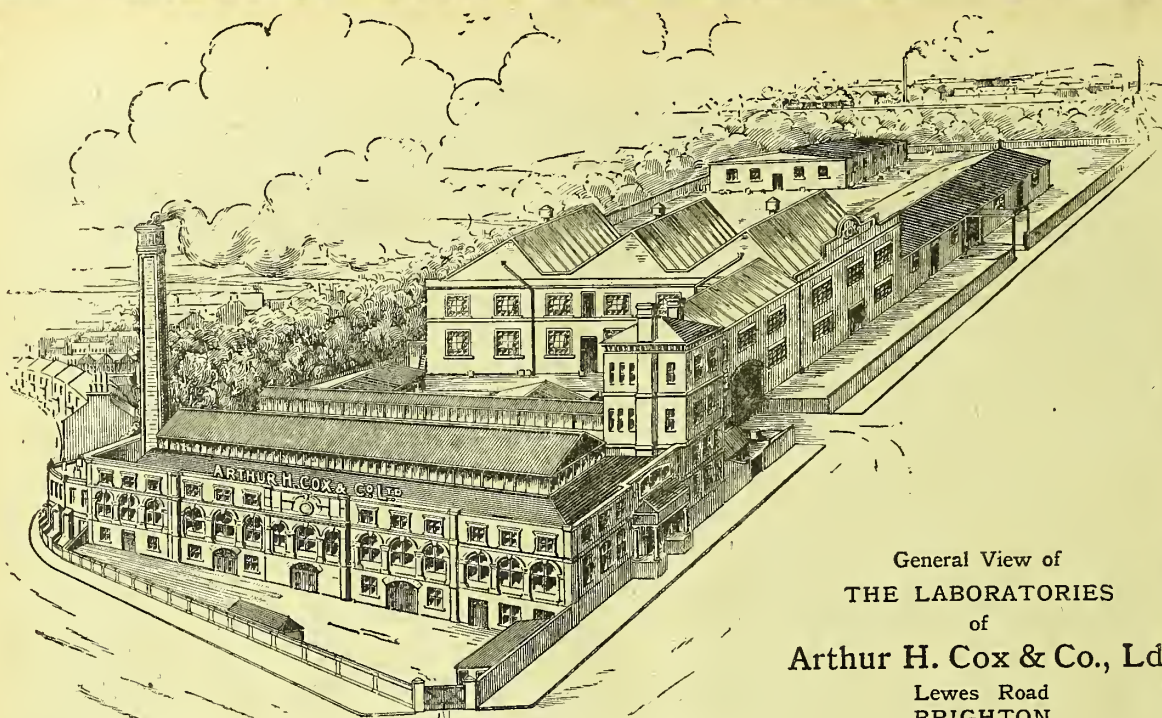
In 1839 the heat was supplied by a lamp. In 1919 these two Galloway Boilers are hardly sufficient for the Factory's requirements.

Arthur H. Cox & Co., Ltd.

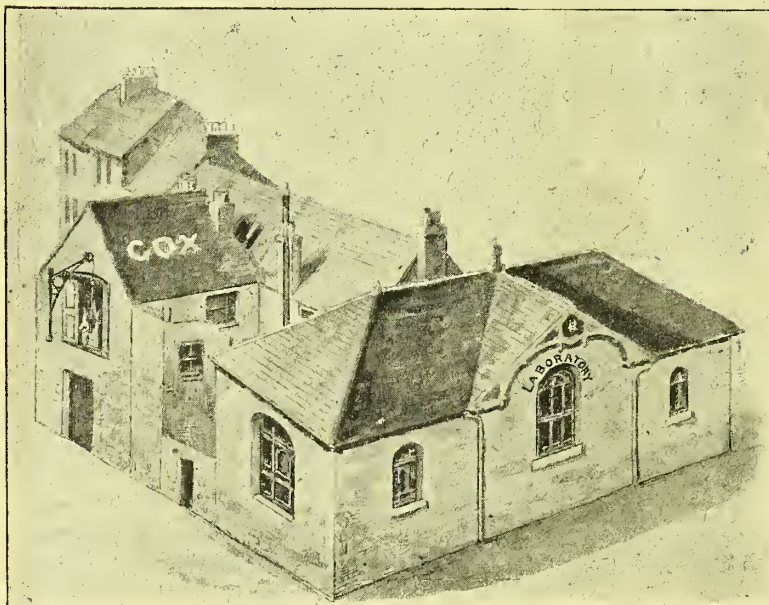
Brighton.



A VIEW OF THE EXTRACT MAKING ROOM.



General View of
THE LABORATORIES
of
Arthur H. Cox & Co., Ltd.
Lewes Road
BRIGHTON



The old works of the late Mr. Arthur H. Cox—1839.

80 YEARS
AGO
TO-DAY

Saturday, June 14, 1919,
the late Mr.

Arthur H. Cox

laid the
foundation stone
of
this Firm

ARTHUR H. COX & CO. LTD

Manufacturing Chemists

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ENGLAND**



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**ACETYL SALICYLIC ACID
BROMIDE of POTASH
CHLORAL HYDRATE
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EUCALYPTUS OIL
METHYL SALICYLATE
SALICYLIC ACID
SALICYLATE of SODA**

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15/9
EACH

MAW'S PAGE

S. MAW, SON & SONS LTD.
7/12 ALDERSGATE ST.
LONDON
E.C.1

No. 400
JUNE 14, 1919.

Jack

With a persistency that must have long ago convinced even the most sceptical, it has been repeatedly stated that "All work and no play makes Jack a dull boy."

Whether Tom, Dick and Hilda can dispense with a little relaxation without a corresponding loss of high spirits has never been divulged, but such a contingency will never have the opportunity of arising in the House of Maw. Last Saturday, for example, specially lengthened trains carried the *personnel* of Maw's to Blackheath, when the new ground of our Athletic Club was brilliantly opened with a "Victory Sports Meeting," consisting of cricket matches, and a series of contests that provided exercise, excitement, and enjoyment for over half-a-thousand people.

We had a band. We had a concert. We had a prize distribution. Keen appetites did justice to a substantial tea.

We had, in short, "OUR DAY."

"Waterloo," it is said, "was won on the playing-fields of Eton." We should like to think—and believe—that success is won on playing-fields such as we now possess at Blackheath.

Ambition to *do* things on the sports ground creates a desire to *do* things in other spheres of life. The incentive that urges on the runner to the tape is the incentive that prompts the worker to attain the goal of efficiency.

Initiative is a plus asset to every House. It makes for better service, and better ideals.

"If it's Maw's, it's best," has been an accepted axiom with generations of chemists. It is a record that we cherish. We are ever seeking to enhance and strengthen the value that is put up in our name.

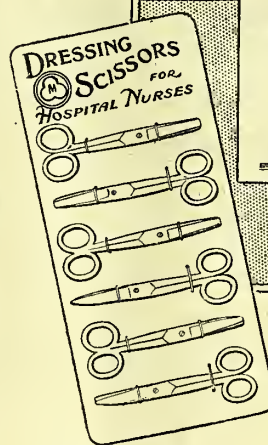
Efficiency, Imagination, Pride and Satisfaction. These are some of the guiding principles of the House of Maw.

In business and pleasure we apply them.

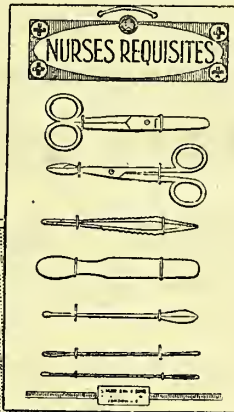
Capsule

MAW'S—"THE HOUSE OF THE MOMENT."

CARDED GOODS for NURSES



PRICE 15/9 CARD.



PRICE
10/6 CARD

These cards of requisites

will appeal to your professional customers. Dressing scissors: 6 pair assorted English-made scissors of 3 patterns, 15/9 card. Nurses' requisites, 10/6 card.

TOLD IN BRIEF

POCKET KNIVES, 2 blades. No. 1, plated metal handles. Nos. 2, 3 and 4, xylonite handles in three colours, white, blue and green, 2/8 each, or on cards of 6 assorted, 15/- card.

No. 11 MARKING INK. Put up in crinkled bottle in cardboard cases, this popular ink, requiring no heat, is in large demand during the holiday season. New size, 4/- dozen.

PINT MEASURES. Tinware. Fitted with collar to prevent spilling, and spout for pouring. Stamped. Order No. B2109/R, 2/3 each.

Quite
Simple
to
Use.

CUT HERE

No. 400

MAW'S
PAGE

ORDER
FORM

To Messrs.
S. MAW, SON & SONS, LTD.
Dept. 2, 7/12 ALDERSGATE
ST., LONDON, E.C.1

Please forward the following goods as listed in MAW'S PAGE dated June 14.

ITEMS	QUANTITY	PLEASE LEAVE BLANK
Pint Measure		
Marking Ink ...		
Pocket Knives ...		
Nurses' Scissors ...		
Nurses' Requisites ...		
"Duspro" (Chest.....in.) (length.....in.)		

NAME AND
ADDRESS:

DATE..... CONVEYANCE.....



FRAME FOOD JELLY IS AGAIN AVAILABLE

IT PAYS the CHEMIST HANDSOMELY to BUY
FRAME FOOD PREPARATIONS DIRECT.

£2 Carriage Paid secures the Best Terms.

ADVERTISING MATTER FREE.

Showcards, Infant-Powder Envelopes, Prescription
Envelopes, Billheads, Dummies—an ample supply
will be sent to Chemists only, on application.

FRAME FOOD CO., Food Specialists

(Callard, Stewart & Watt, Ltd.)

Standen Road - - SOUTHFIELDS, S.W. 18

INDEX TO ADVERTISERS

ALBERT & Co., Ointment	xliv	CARRERAS, A. & E., Toilet	28	FRAME FOOD Co., Foods	12
ALBION S. Co. Co., LD., Mercerised Cords	48	CASSON CHEMICAL Co., LD.	xxi	FRENCH, W. T., & SON	xlix
ALCOCK MANUFACTURING Co.	xliii	CELLOPHANE Co., Bottle Wrapping ...	xxviii	FUERST BROS., LD., Chemicals	vi
ALLEN & HANBURY LD., Price Changes Cover		CHATELAIN, J. L., French Proprietaries ..	xi	FULFORD, C. E., LD., Ven-Yusa	21, 31
ALLIANCE DRUG Co., Chemicals	xliii	CHERTINE FOODS Co., Foods	lvii	GALEN MFG. Co., Bathing Caps	lvi
AMSTERDAM QUININE WORKS	ix	CHEMICAL WORKS MADDERY, LD., Male ..		GARDEN CITY RUBBER Co., Rubber Corks ..	ii
ANALO-FRENCH DRUG Co., LD.	v	Fern Extract	xxx	GARRETT, J. E., Newskin	xxix
ANZORA PERFUMERY Co., Hair Cream ...	32	CHESTER & N. WALES COLL. OF PHARMACY ..	lvii	GASTON, WILLIAMS & WIGMORE, LD. ...	xxxii
ATKINSON, SAUNDERS & Co., LD., Whole- sale Druggists	15	CHIESMAN, F., & Co., Ess. Oils	xxxiii	GATES, LESLIE, Bottle Cappings	lv
BAILEY, ROBERT, & SONS, Surgical	18	CHRISTOPHERSON, C., & Co., Cream of Tartar	vii	GATHERWOOD'S, B. W., Exou., Dried Herbs	xiii
BALDWIN MFG. Co., LD., Toilet Cream ..	liv	CHRIST, T., & Co., Shampoo	i, lvi	GIGNOUX FRERES & BARBEZAT, Drugs ..	xxxiv
BANDONG QUININE FACTORIES	viii	CLEVELY'S CHEMICAL Co., Nerve Pellets ..	xxii	GILLES C., Photo. Developing, &c	38
BARKER, R., & SON, Infants' Pres. ...	xxiv	COLLEGE OF PRECEPTORS	lvii	GILLARD GORDON, LD., Eucalyptol	38
BARNETT & FOSTER, Aerated Water		COMSTOCK, W. H. Co., LD., Indian Root Pills	41	GILLETTE SAFETY RAZOR, LD.	53
Machinery	lix	CONDUIT, FRANK A., Sprinklers	liv	GLEW, F. H., Radium Compound	xxix
BEATLEY SOC. COMMERCIALE, Chemicals ..	xxviii	CONNELL, A., & Co., Toilet	44	GRIFFIN, J. J., & SONS, LD., Machinery ..	lii
BETHAM, M., & SON, Toilet Cream	32	COOPER LABORATORY, Tablets	xv	GOODMAN, G., LD., Safety Pins	liv
BENNINGSON, W., & Co., Olive Oil	xxii	COOPER, SON & Co., LD., Cachets	lvi	GOUGH, KIDSTON & Co., Chemicals ...	xxxv
BENZOATES, LD., Drugs	vi	CORBETT, A. F., & Co., Shopfittings ...	1	GREEFF, R. W., & Co., Chemicals	9, 10
BRO, V., & SONS, Liquorice Juice	xxii	COX, ARTHUR H., & Co., Aspirin, 80 years anniversary	1, 2, 3, 4, 5, 6, 7, 8	GREEN, J. BARCHAM, & SON, Filter Papers	xlvii
BERK, F. W., & Co., LD., Acids, Chemicals	xx	CRAMPTON, J., & Co., LD.	xxxvii	GREENWICH LEMONADE Co., LD.	46
BERRY'S, J. B., SONS Co., INC., Pet. Prods.	xx	CRAVEN, G., Pile Cure	xliii	GROVE CHEMICAL Co., LD., Liquid Glues ..	xxi
BERTON, ARTHUR, LD., Tooth Powder, &c. ..	34	CRAWSHAW, E., & Co., Aniline Dyes ...	lvi	HARLEY, T., Rat Poison	xlviii
BIDWELLS, LD., Brushware	30	CROSFIELD, JOSEPH, & SONS, LD.	42	HARRISON, A., & SONS, Printing	49
BIRKS, EDWARD, & SON	xxxviii	CUPAL, LD., Secto	56	HASKINS & BROS., LD., Shop Fittings ...	49
BLADEN, VICTOR, & Co., Chemicals ...	xii	CURACEA	46	HAY, E. J., & Co., Caramel	xxxvi
BLYTHE, W., & Co., LD., Epsom Salts ...	xvi	CURSON, GERRARD & Co., LD., Boracic Socks	19	HATWOOD, J. H., LD., Surg. Appl.	xliii
BOAKE ROBERTS, A., & Co., LD., Essences, Acetic Acid	25, xv	C.V.O. CHEMICAL WORKS, Lanoline	xi	HERTZ & Co., Cod Liver Oil	xxxvi
BRILLIANIA Co., Hair Preparation	lvi	DAVENPORT, J. T., LD., Chlorodyne ...	lxii	HILL, SAMUEL, LD., Filter Cloth	xlii
BRITISH & COLONIAL PHARMACIST	37	DEGEN, F. A., Advertising	lvii	HINDS, LD., Hair Tint	liv
BRITISH CELLULOSE & CHEMICAL MFG. Co., LD., Calcium Carbide	xix	DEE OIL Co., LD., Petroleum Jelly	48	HITCHINS, W., & Co., LD., Postal Boxes ..	xliii
BRITISH CYANIDES Co., LD.	56	DEMUTH'S LABORATORIES, Toilet Preps. ..	28	HOBSON, TRIMBLE & Co., LD., Plasters ..	xxix
BRITISH DIAMANT Co., Malt Extract ...	xxiv	DUBLIN EVENING HERALD	44	HODGES, ROWLAND, Razors	xliii
BRITISH DRUG HOUSES, LD.	Cover	DUN, R. T., Indian Capsules	xliv	HOLLAND'S DISTILLERY (Essential Oils) LD. ..	xi
BRITISH MERCHANTS INC., LD., Drugs ..	xxxiv	DUNCAN, FLOCKHART & Co., Anæsthetics ..	ii	HOLLIDAY, L. B., & Co., LD., Fine Chemicals	x
BRITISH PASTEUR-CHAMBERLAND FILTER Co., Filters	xxxix	DUROSE, F. W., Bottle Caps	liv	HOLT, THOMPSON & Co., Salicylic Acid ..	xv
BROOK, PARKER & Co., LD., Sacch. Tabs. ...	xxx	EELLES, WALKER & Co., LD., Containers ..	1	HOPKIN & WILLIAMS, LD., Reagents ...	iii
BROOKS, PEEL & Co., LD., Tubes	lv	EFANDEM Co., LD., Electrical	lii	HOUGH, HOSEASON & Co., LD.	xlv
BROWN & SON, Water Still	lviii	ELLIOTT OPTICAL Co., Optical Goods ...	xlvi	HOVENDEN, R., & SONS, LD., Grease ..	liii
BROWNING, W., & Co., LD., Petroleum Emulsion	xxxv	ELLISON, H., LD., Carb. Acid, Disinfect. ..	lvi	HUBBUCK, T., & SON, LD., Oxide of Zinc ..	ii
BULL, D. W., Paper	xvii	ERASMIC Co., LD., Vanishing Cream ...	32	HUISKING, U. L., American Drugs, &c.	xiv
BURGE, WARREN & RIDGLEY, LD., Brushes. ..	34	EVANS, ADLARD & Co., Filter Papers ...	1x	HULSEN, JULIUS, & Co., Barium Salts ..	xx
BURROONE, BURROONES & Co., Liniment ..	40	EVANS SONS LESCHER & WEBB, LD., Montserrat Lime Fruit Juice	xli	HYPOSOL, LD.	Text
BURLINGTON CORRESPONDENCE COLLEGE ...	lvii	EVAN-WILLIAMS Co., LD., Shampoo ...	25	INORAM, J. G., & SON, Indianrubber Goods ..	lxi
BURNSIDE & Co., Eucalyptus Oil	xxi	FARRIS, CHARLES, Waxes	10	JACKSON Co., Dental Cream, &c.	16, 17
CALVERT, F. C., & Co., Tooth Powder ...	30	FARROW & JACKSON, LD., Filters	li	JOB BROS., Cod Liver Oil (Newfoundland) ..	33
CAMWAL, LD., Min. & Aerated Waters ..	46, 47	FAWCETT & Co., Barley	xxxix	JOHNSON, A., & Co. (London), LD. ...	iv
CARMICHAEL, F. J., & Co., Camomiles ...	xxii	FEBBER, R., LD., Capsules	xxxvii	JOHNSON & SONS (Mfg. Chts.), LD. ...	lx
CARMOL, LD., Packers	xxiv	FERRIS & Co., LD., Opium Preps., &c.	xxix	JOHNSON, MATTHEY & Co., LD., Rore Metals	vii
CARR, G., & Co., LD., Saccharin	xxxii	FIELD, C. W., Saponine	44	KAY BROS., LD., Proprietaries	xlix
		PINK, F., & Co., Gums	lvi	KEANE, T., & SON, LD., Sample Bags ...	1
		FORD, SHAPLAND & Co., LD., Printing ...	52	KEENE Co., Aspirin, &c.	xxviii
		FRAM MFG. Co., LD., Crystal Tablets ..	48		[continued overleaf]

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SALICYLIC ACID
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INDEX—contd.

KEEFOOT, T., & Co., LD., Zone Salt ...	45	OKLEY, JOHN, & SONS, Knife Polish ...	xxi	STARUP, G. C., CHEMICAL WORKS	xxxii
KNOX-WALKER, J., & Co., LD.	lvi	OLDFIELD, PATTINSON & Co., Pharma- ceutical Preparations	Cover	STEARNS, F., & Co., Peppins	xix
KOLENE Co., Toilet	xxxv	P.A.T.A.	xxxviii	STOKES & Co., LD., Toilet	36
LAMBERT, SAMUEL & Co., Drugs and Essences	xlii	PAGE, CHAS., & Co., LD., Chemicals ...	x	STURGE, JOHN & E., LD., Precip. Chalk ..	xviii
LANE, C., & SONS, Chemicals	xxvii	PAINE & Co., LD., Malt Extract	38	SWISS BANK CORP., Mercantile Banking	44
LANG, JULES, Glassware	36	PAPER TUBE & BOX CO., LD., Containers	li	TAYLOR, A. J., & Co., Gums	xxix
LANKSHEAR, WICKSTEAD & Co., LD. ...	xx	PARKE, DAVIS & Co., Tooth Paste ...	22	TEXACO MFG. Co., Water Paint	48
LAPORTE, B., LD., Hydrogen Peroxide	viii	PARNALL & SONS, Shop Fittings	49	THEW, HOOKER & GILBERT, Malted Milk	xxv
LEATH & ROSS, Homoeopathic Medicines	lxiii	PEARS, A. & F., LD., Soaps	29	THOMAS, W. H., & SONS, LD., Pack- ing Cases	lviii
LEICESTER RUBBER CO., "Mend-a-Tear"	xliv	PEAT PRODUCTS (SPHAGNUM), LD. ...	xlviii	THOMPSON & CAMPER LD., Tablet Machines	52
LEVERMORE, A., & Co., LD., Precip. Chalk	lvi	PERKEN, SON & Co., LD., Clinicals ...	xlvii	TIMPSON, JOHN, & Co., LD., Baby Powder	24
LEWIN, L. & M., BROS., & Co., Vermis Killer	lxviii	PERRY & HOPE, LD., Malt Extract ...	xxxvii	TOKALON, LD., Toilet Cream, &c.	20
LEWIS, A. J. C., Photographic	lvii	PICERNO, V. A., Chemicals and Drugs	xx	TOMODA & Co., Japanese Chemicals, Drugs	xxiii
LICHTENSTEIN & Co., LD., Caramel ...	xxxvi	PICKARD, IVE & RANKIN, LD., Acet. Sal.	xvi	TOMPKINS, J., LD., Rubber Goods ...	lvi
LILLY, ELI, & Co., Dental Lotion ...	Cover	PILSON, MORRELL & Co., LD., Aspirin	xviii	TOWNSEND, J., & SONS, Printing	38
LINTON, HUBBARD & ANDREW	xxx, xxxii	PILLSCHER, J., Thermometers	xli	TRANSCONTINENTAL AGENCIES, LD. Wines	46
LLOYDS BANK, LD.	li	PHARMACEUTICAL LANTOLINE Co.	50	TURNER BROS. ASBESTOS Co., LD.	xliv
LOTHOUSE & SALZBER, LD., Health Salts	xl	POLSON, N. C., & SONS, LD., Agency	xxvi	UCAL	54
LONGABARC TRADING Co., Essential Oils	36	POTTER & CLARKE, LD., Herbs, Asthma	xxiii	UNITED ALKALI Co., LD., Chloride of Lime	vii
LONDON CHEMICAL WORKS, LD.	13	POWELL, J. T., & Co., Hydrometers ...	xli	VAN DER HOEK, G., Bottles	xxix
LONDON COLLEGE OF PHARMACY	lvii	PRESTON'S LIVERPOOL DISTILLERY Co. LD.	liv	VAN DUZER, S. R., & Son, Trade Notice	26
LONDON PHARMACEUTICAL REFINERS, LD.	xxviii	PRICE, A. S., & Co., LD.	xxxviii	VENESTA, LD., Tinfoil	42
LORIMER, JOHN, Sunatogen	xxv	PRICHARD & CONSTANCE MFG. Co., LD., Toilet	26	VERNON & Co., LD., Surgical Dressings	lxiii
LUST, W., & SONS, Packing Cases ...	lviii	PRIZE COURT SALES	34	VICHY WATER	47
LUTY, LD., Lysoline	55	PURE RUSSIAN LIQUID PARAFFIN Co. LD.	xxxiv	VICTORS, LD., Sodium Phosphate	xix
MCDUGALL BROS., Dog Medicines ...	xlii	QUELCH, HENRY C., & Co., Nail Preps.	27	VIRGIN, RENNET Co., LD.	xxxviii
M'GLASHAN, D., Fruit Drink	38	RAMSEY, S., & Co., Sieves	xxxviii	VISCOSCO Co., LD., Bottle Cappings ...	lv
M'KESSON & ROBBINS, Drugs	xvi	RAWORTH, J. E., & Moss, Patents ...	lvi	WAIDE, THOS., & SONS, Chemists' Printing	ix
MACLEAN, W., SONS & Co., Chemicals	xxii	REDIO Co., LD., Nail Cloths	33	WALKER, G., & Son, Saline	xi
MAC SWEENEY, E., Corn Cure	lvi	REYNOLDS, A. T., Thermometers	50	WALTON, T. H., & Co., LTD., Saccharin	xxxii
MACANDREWS & FORBES, LD.	xxxii	ROBERTS, LD., Toilet Preps.	24	WASHINGTON CHEMICAL Co., LD., Magnesia	xii
MACFARLAN, J. F., & Co., Alkaloids ...	iv	ROBERTS' PATENT FILLING MACHINE Co.	lviii	WATFORD MFG. Co., LD., Vi-Cocoa ...	xxxix
MAGNUS, MAREE & REYNARD INC.	35	ROQUES, FERDINAND, Alkaloids, Caco- dylates	vi	WENGERS, LD., Ceramic Chemicals ...	vi
MALLINCKRODT CHEMICAL WORKS	ix	ROSE, J. L., Pyrogallie Acid	lvi	WEST-END PHARMACY SUPPLY, Capsules	lvi
MALMBERG, K., Petroleum Jelly	ix	ROSENBIATT, SAMSON, Chemicals	xxx	WESTERN DENTAL MANUFACTURING Co.	xxxv
MARKT & Co. (LONDON), LD., Sponges	35	ROYAL DUTCH CHEM. WORKS, Agents	xxii	WESTMINSTER COLLEGE OF PHARMACY ...	lvii
MAW, S., SON & SONS, LD., Soothers, &c.	11	ROZEN, L., & Co., Chemicals	xxxvii	WHIFFEN & SONS, LD., Emetine Salt ...	xiv
MAY, ROBERTS & Co., LD., Tooth Brushes	Cover	RUDD, F. M., Oils	liv	WHITE BAND MFG. Co., Face Cream ...	29
MADE-KING, ROBINSON & Co., LD. ...	50	RUFF, G. W., Avillia Perfumery	14	WHITE, J. & J., Bichromates	xxvii
MEINDERSMA, B., Dutch Trade	xxvi	SACCHARIN CORPORATION, LD., Novocain	vi	WHITAKER & Co., Hat Dyes, Household Dyes	43
MERTEN, F., Showcards	lvii	SALOMON & LEVIN, Palestine Agencies	xxvi	WILLIS, A., & ARTHUR, LD., Perfume Brick	35
MILLAR, A., & Co., LD., Quinine Wine	50	SAMPSON & WHITE, LTD., French Chalk	xxii	WINOX, LD., Wine	xl
MILNER'S CHEMICAL Co., Toilet Cream	xlviii	SANITAS Co., LD., Disinfectants	Text	WINTER, E., & Co., LD., Silver Leaf	xxi
MOND NICKEL Co., Blighty Mixture ...	xlix	SCHOLL MFG. Co., LD., Foot Appliances	xliv	WINGLESWORTH, E. H., Fly Gum ...	xlx
MONSANTO CHEMICAL WORKS, Chemicals	lxiv	SCOTT'S CHEMICAL Co., Toilet Water...	30	YOUNG, GEORGE (CHEMISTS), LD., Chemicals	xx
MULLER LABORATORIES, LD., Nutrient...	ix	SHADEINE Co., Hair Dyes	lvi	ZENOBIA, LD., Perfumes	33
MUTUAL BLUSH Co.	30	SHERBOURNE, T., & Co., Suspensory Bandages	lvi	ZIMMERMANN, C., & Co. (PHOTOGRAPHIC), LD.	xlvi
NAPPER & DAVENPORT, Tube Clips ...	1	SIBER, HEGNER & Co., Agency	xxvi		
NILDE, PARIS., Powder	23	SMITH, T. & H., LD., Drugs	xli		
NORRIS BROS., LD., Chemicals	xvii	SMITH, MAURICE, & Co., LD., Foods	xxxix		
NORTH, V. C., & Co., Fine Chemicals	xx	SOCIETEIT VOOR CHEMISCHE INDUSTRIE			
NORTHERN TIN CANISTER WORKS	lv	KATWIJK, Caffeine, &c.	xi		
		SOLERNOU, VUDA DE JOSE, Agencies	xxxviii		
		SPATULA PUBLISHING Co., Books	xlvii		



"AVILLIA" OILS OF FLOWERS

IN BULK

DIRECT IMPORT FROM FRANCE

Finest quality heavy mineral oil, perfumed by the maceration of flowers. The only method by which the most delicate fragrance of the flowers is not destroyed. A vastly superior product to the oils perfumed with essences and frequently offered as the genuine article.

Odours: VIOLET, JASMIN, ROSE, ORANGE,
MUGUET, WALLFLOWERS, ETC.

No. 12, 4/- per lb. No. 24, 6/- per lb. No. 36, 8/- per lb.

Packed in 1, 2, 5, 7, 14 & 28 lb. cans.

Owing to the prevalent shortage of bottles, many firms desire these oils packed ready for retail. To meet this demand I am offering an attractive line of 1 oz. glass-stoppered bottles (see illustration), in No. 24 quality oil, assorted perfumes, at 15/- per doz. Free delivery in United Kingdom.

MINIMUM RETAIL PRICE, 2/6 per bottle.

Address: G. W. RUFF, London Manager,

"AVILLIA PERFUMERY" 95 & 97 Charlotte St.,
LONDON, W. 1

The Perfect Cologne !



It is not enough that Cologne should smell sweet from the bottle. The sweet, soothing aroma must last, and last sweetly on handkerchief or fevered brow.

There should be no change in the aroma of the perfect Cologne. Its freshness should be as persistent as its lasting properties.

Eau de Cologne Delvoix lasts, and lasts sweetly. Its freshness refreshes continually. It soothes the fevered brow, and delights the sense of smell. Its aroma never clogs, and it is the perfect Cologne.

1-oz.	2-oz.	4-oz.	
14/-	25/6	46/-	per dozen.
Reptd. $\frac{1}{2}$ -pt.	1-pt.	2-pt.	
In Wickers 66/-	128/-	250/-	" "

As is our custom,
Showcards are
free on request.

AYRTON, SAUNDERS & Co. Ltd.
LIVERPOOL

TWO LINES



Acknowledged as the two best DENTAL CREAMS made.

Order through your Wholesaler.

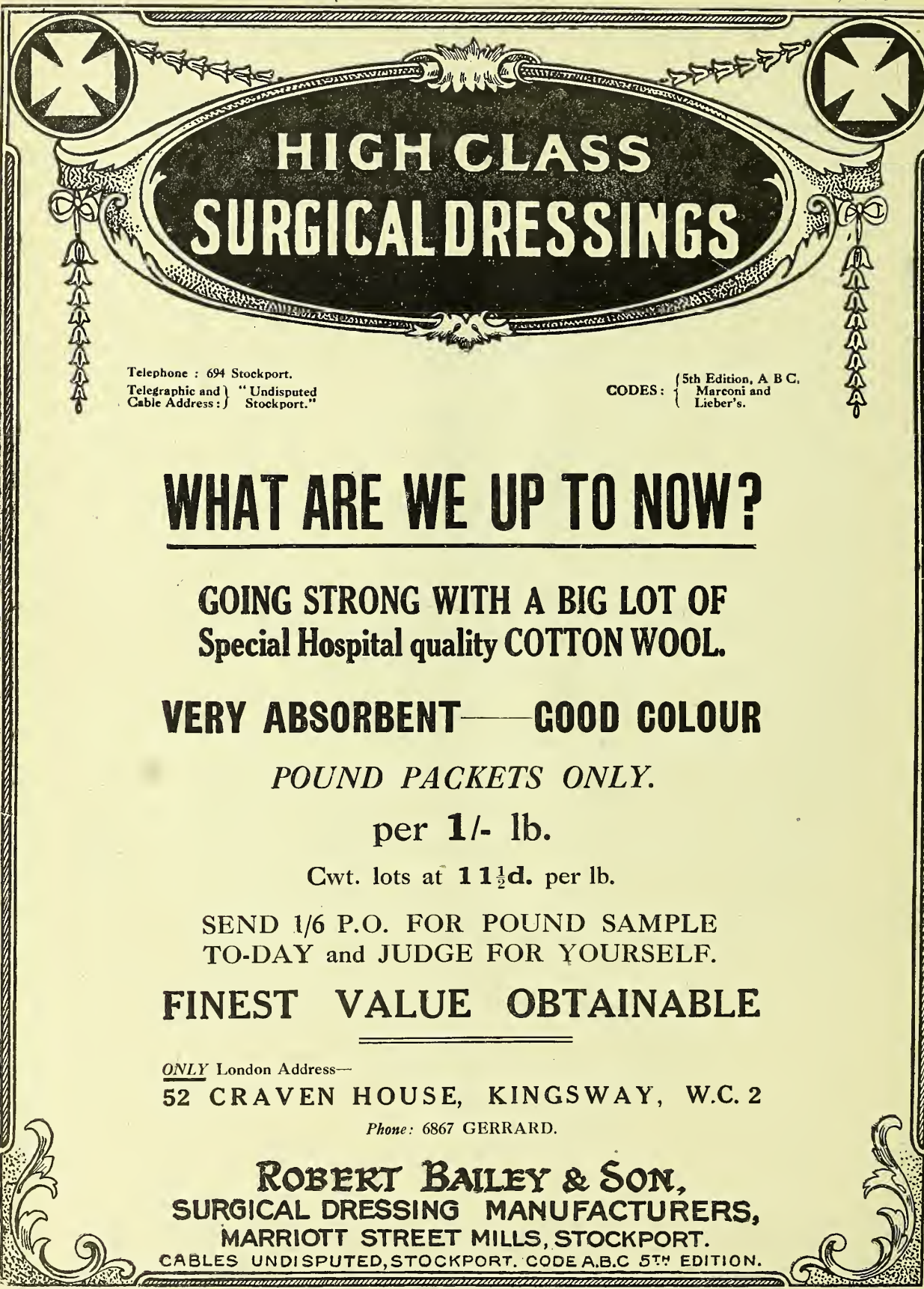
SOLE MANUFACTURERS AND PROPRIETORS—

THE JACKSON CO.

THAT PAY



72 ST. JOHN ST., **LONDON, E.C. 1**



HIGH CLASS SURGICAL DRESSINGS

Telephone : 694 Stockport.
 Telegraphic and } "Undisputed
 Cable Address : } Stockport."

CODES : { 5th Edition, A B C.
 Marconi and
 Lieber's.

WHAT ARE WE UP TO NOW?

GOING STRONG WITH A BIG LOT OF
 Special Hospital quality COTTON WOOL.

VERY ABSORBENT—GOOD COLOUR

POUND PACKETS ONLY.

per 1/- lb.

Cwt. lots at 11½d. per lb.

SEND 1/6 P.O. FOR POUND SAMPLE
 TO-DAY and JUDGE FOR YOURSELF.

FINEST VALUE OBTAINABLE

ONLY London Address—

52 CRAVEN HOUSE, KINGSWAY, W.C. 2

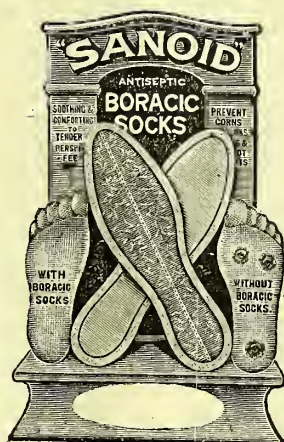
Phone: 6867 GERRARD.

ROBERT BAILEY & SON,
SURGICAL DRESSING MANUFACTURERS,
MARRIOTT STREET MILLS, STOCKPORT.

CABLES UNDISPUTED, STOCKPORT. CODE A.B.C 5TH EDITION.



"SANOID" Boracic Socks



Facsimile of Showcard.

Many Chemists have enjoyed the ready Sale of
Boracic Socks which literally

SELL THEMSELVES

7/3 per dozen pairs.

84/- per gross pairs.

ON P.A.T.A. LIST.

Retail price **10½d.** per pair.

Sample Pair post free on application.

CUXSON, GERRARD & CO. LD.
OLDBURY, near BIRMINGHAM.

Export and Colonial inquiries specially invited.

There are many cheaper Creams than Tokalon
— but your Customers don't want them.
There may be better Creams than Tokalon
— but just try to find them!

CRÈME TOKALON



PRICES 1/3 & 2/-

With the help of our advertising, you, Mr. Chemist, have to sell Tokalon cream and powder to your customer the first time, but from then onward they sell themselves. After once testing these remarkable products the customer will not feel satisfied with any others.

Why it is that
Elsie Janis finds
Crème Tokalon
so different from
all others.

Crème Tokalon imparts marvellous beauty to the complexion because it contains buttermilk and other skin-preserving and nourishing ingredients found in no other Cream.

COMPLEXION PERFECTION
is merely a matter of using
**CRÈME
TOKALON**
(Pronounced Toke-a-lon)

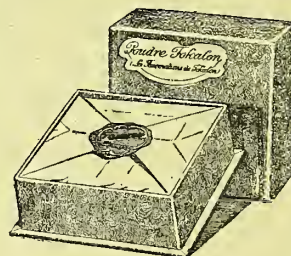


What Elsie Janis says about

CRÈME TOKALON & POUDRE TOKALON.

"Carefully choose a good cream and a good powder, both made by a responsible manufacturer. Try them carefully, noting the exact effects. If satisfactory adopt them for regular use and never touch any others. I even advise going so far as to have cream and powder analysed by an expert chemist. This will be somewhat costly at first, but it may save you money in the end. It may even save your complexion. The cream must not only be absolutely pure, but it should be non-greasy. The powder should be of extreme fineness. I personally use Crème Tokalon and Poudre Tokalon. No one could ever persuade me to use any others."

POUDRE TOKALON



PRICES 1/9 & 2/11.

In compressed form
(Comprimés) 1/3 each.

Our goods, bought on
best terms, Show you
57% Profit on your
Outlay.

Strong and attractive
show-cards of proven
selling power sent free
on request.

CARRIAGE PAID ON
ALL ORDERS FOR
3 DOZ. OR OVER.

Why it is that
Elsie Janis finds
Poudre Tokalon
so different from
all others.

The extreme fineness of Poudre Tokalon, as mentioned by Elsie Janis in her letter, is produced by the "air-floating" process which we use exclusively in manufacturing the powder.

YOU SHOULD ALWAYS KEEP THESE TWO QUICK-SELLING LINES IN STOCK.

TOKALON LIMITED, 212-214, Great Portland Street, London, W.



SPECIAL WINDOW-SHOW OFFER

YOU purchase an assorted parcel of Ven-Yusa

Cream Soap, and Shampoo Powders value

£2 10 0

WE allow you for Showing Cards

0 5 9

Net Credit Terms

£2 4 3

IF CASH ENCLOSED deduct **2½** per cent. ...

0 1 3

Net amount to send

£2 3 0

YOUR PROFIT on the Investment will be 50%

Larger Orders are accepted on pro-rata terms, 2½ % extra allowed on orders of 12 times above quantities, if cash with order.

MINIMUM PRICES FACE VALUE.

ORDER FORM.

To Messrs. C. E. FULFORD, LTD., Carlton Hill, LEEDS.

Date

Dear Sirs,

Please supply on Window-Show Terms—

			£	s.	d.
.....Gross.....	Doz. 1/- size Ven-Yusa Cream	... @ 9/3 doz.			
.....Gross.....	Doz. 6d. " " Soap	... @ 4/6 "			
.....Gross.....	Doz. 1/6 " " Shampoo Powders	13/6 "			
		(7 3d. Shampoos in packet)			
.....Gross.....	Doz. 3d. packets " Shampoo Powders, 22/- gross				
		(6 doz. Cartons only)			

Remittance enclosed £ : : £

Name and Address

MINIMUM PRICES FACE VALUE.

Note.—If Cash does not accompany order, references should be given for New A/cs. **Credit Terms are Strictly Net, 30 days.**

Attracting New Customers

In the bad old days of price-cutting the argument was that proprietaries at cost price drew to the pharmacy new customers who would proceed to buy other goods, or, better still, become regular customers.

Whether there was something in the idea or not, a much more satisfactory way is to draw trade by means of a well-known proprietary like

Euthymol
TOOTH PASTE

which yields a handsome protected profit at the same time.

The product is in special demand at the present time. Whilst on military service many thousands of men discovered the exceptional merits of this premier British-made tooth paste, and now they are back in civil life they naturally walk into the pharmacy which displays Euthymol Tooth Paste. Show it in your windows and on your counter.

*Send a card today
for Special Terms*

PARKE, DAVIS & CO.
50-54 Beak Street, LONDON, W.1.

Laboratories :: Hounslow, Middlesex.

POUDRE NILDÉ

in the sifter box.

Appeals irresistibly to every woman. The
quickest selling line of Face Powder ever shown.

Minimum Selling Prices:

POUDRE NILDÉ

in the sifter box.

SMALL SIZE, for the handbag	-	1/-
LARGE SIZE	- - - -	3/6
Leather or Fancy Silk Vanity Cases,		
Small Size, with mirror	- -	4/6
LARGE SIZE	- - -	9/-

ROUGE NILDÉ

in the sifter box.

SMALL SIZE	- - - -	1/6
IN LEATHER CASE	- - -	5/-

SHOWS YOU 33 $\frac{1}{3}$ % PROFIT.

Through your Wholesale House.

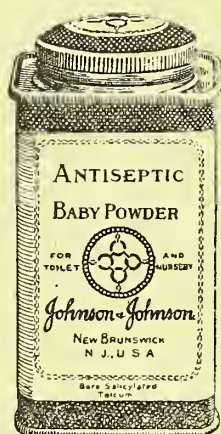
EACH BOX CONTAINS A PUFF

NILDÉ PARIS

British & Colonial Agents:

8 Blenheim Street, London, W. 1.





**Look for the
Name and
Trade Mark.**

ANTISEPTIC BABY POWDER

MANUFACTURED BY

Johnson & Johnson.

We wish to warn our Customers, so that they may be on their guard, that our package is being imitated. This step, which is so easy, is an undignified and shabby attempt to rob us of our goodwill.

WARNING.

The contents cannot be imitated, and the Trade Mark cannot be imitated; and we would ask those Customers who have handled this preparation for a quarter of a century, with every satisfaction to themselves and to their clients, to resent this method of copying other firms' productions by insisting on having the original package bearing the registered Trade Mark, which is the guarantee of quality.

JOHN TIMPSON & CO., Ltd.,
104 Golden Lane,
LONDON, E.C.

DIADEM Face Powder

possessed of the delightful fragrance of Diadem Cream, adheres readily to the skin. Made in Blanche, Naturelle, Rachel, Rose and Sunburntints. Packed in large artistic boxes, in the distinctive Robartes' style and colouring. A sure seller.



DIADEM WAX *For the Complexion*

Completely supersedes the customary greasy Toilet Creams. Is most pleasant in use and commands ready sales. Attractively produced in elegant large jars.

DIADEM Crème Rouge

Gives an undetectable and natural colour to the cheeks. Far more convenient in use than the existing dry rouges. Easily removable whenever desired.

DIADEM Vanishing Cream

A cream of rare purity and charm, put up in novel white globes which have an irresistible appeal and packed in dainty boxes in Robartes' attractive style.

DIADEM Talcum Powder

The ideal powder for Nursery and Toilet use. Choicely perfumed, and may be used with impunity on the most sensitive skin. In handsome perforated tins.

DECOLTENE *The liquid hair remover*

The intelligent depilatory. Simple, safe, effective, and harmless. Can be used while performing the toilet. Daintily packed.



An attractive line that enjoys good sales. A greasless cream that takes all odour out of perspiration. Packed in attractive jars.

TRADE TERMS.

	P.A.T.A.	Trade per doz.
Diadem Face Powder ...	2/6	20/-
" Complexion Wax ...	2/6	20/-
" Crème Rouge ...	2/6	20/-
" Vanishing Cream ...	3/9	30/-
" Talcum Powder ...	1/3	10/-
Decoltene Depilatory ...	3/9	30/-
Dinkie Deodorant ...	2/6	20/-

NOTICE.

Artistic Showcards and Counter Matter free on request. Robartes' Preparations are obtainable from all leading wholesale houses. Largely advertised in all the leading dailies, weeklies and monthlies. Further particulars and descriptive booklet forwarded on request.

ROBARTES, Ltd., Dyer's Buildings, Holborn Bars, London, E.C. 1.



The Evan-Williams HENNA

Shampoo Treatment

The delightful shampoos manufactured by The Evan-Williams Company have won for themselves an exclusive position with the best class of customers, chiefly because production is based on actual experience in Hair Treatment. They are continuously advertised, and the retailers' margin of profit is generosity itself. Keep an eye on your stock, and benefit by the excellent business result.

The Evan-Williams HENNA

Brilliantine

is a unique preparation for toning faded and dull hair, which never fails materially to improve the condition. Sells freely, at a generous profit.

"The SHAMPOO SALESMAN," giving full particulars of all Evan-Williams Preparations, is sent free on request.

The Evan-Williams Co., Ltd.

Originators of Henna Shampoo,

18 & 18a, Ogle St., Foley St.,

:: LONDON, W. 1. ::



The Finest Quality
Aerated Waters are
made only with
the Finest Quality
ESSENCES

Boake Roberts

Soluble Essences are
of the finest quality
and being extremely
concentrated are
most economical

Lemon	Ginger Ale
Orange	Stone Ginger (Cloudy)
Ginger	Clear Ginger Beer
Raspberry	Kola Champagne
Strawberry	Lime Juice and Soda
Pineapple	Lemon Squash Vanilla

A. Boake Roberts & Co. L^{td}
Stratford, London.

TRADE NOTICE.

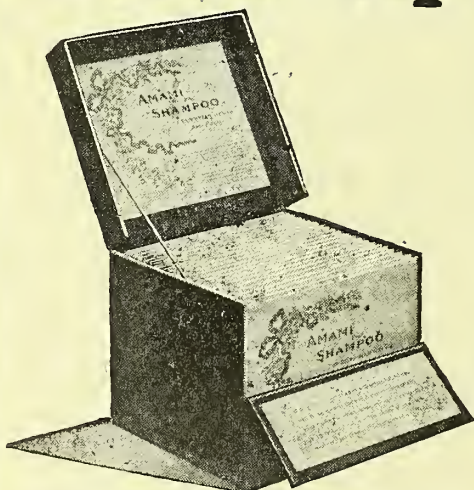
In consequence of the great increase in the cost of the production, distribution, etc., of the undermentioned articles controlled by us, the Proprietors have been reluctantly obliged to establish the following prices which took effect on JUNE 1, 1919.

	Minimum Retail Price per bottle.	Minimum Wholesale Price per doz. net.
Mrs. S. A. Allen's World's Hair Restorer	4/6	43/-
Mrs. S. A. Allen's Zylo-Balsamum	3/6	32/-
Bridal Bouquet Bloom	2/6	23/-
Melrose Favourite Hair Restorer (Large size)	3/6	32/-
Melrose Favourite Hair Restorer (Small size)	2/6	22/-
Odaline	2/3	18/-

These preparations are on the P.A.T.A. Protected List.

S. R. VAN DUZER & SON,
114/116 SOUTHAMPTON ROW, LONDON, W.C. 1.

Amami Shampoo of Henna



This Display Box of 3 dozen Powders is part of the BONUS on £5 Orders.
GET IT ON YOUR COUNTER.

WHOLESALE PRICES.
Boxes of 7 Powders 16/- doz.
Loose 27/- gross

RETAIL PRICES.
Boxes of 7 Powders 2/-
Separate Powders 4d.

Orders of £5 value, Carriage Paid, Cases Free, with

Bonus of { 3 boxes of 7 Pdrs. @ 16/- doz. 4/0 } 10/9
 { 3 doz. Counter Display Box @ 27/- gr. 6/9 }

The £5 Order may be any assortment of Amami Toilet Luxuries. Send for Price List to

**THE PRICHARD & CONSTANCE
MANUFACTURING CO., LTD.**

469 Holloway Road, N. 7.

Phone 3170 North.

"CUTEX"

Nail 
Preparations



How
CUTEX
improves
your nails



Never *cut* the cuticle round your nail because that makes the skin hard, and unsightly hang-nails result. The dainty, better way is to remove the cuticle gently with Cutex. Wrap some absorbent cotton round the orange stick you find in the Cutex package and gently push back the cuticle. It softens at once—then disappears. Rinse your fingers in clean, cold water and dry them. Even after one Cutex manicure you will be astonished at the improvement in your nails.

Cutex costs only 2/- at any Chemists, Stores or Perfumers.

Cutex nail white and Cutex cuticle comfort are each 2/- also. Post free 2/3 from

HENRY C. QUELCH & CO.
4 & 5 Ludgate Sq., London, E.C. 4
Sole Agents for the Manufacturers' Northam Warren Co.,
Montreal and New York.

← THIS ADVERTISEMENT IS APPEAR-
ING FOR A PERIOD OF 12 MONTHS
IN THE FOLLOWING PAPERS—

TATLER SKETCH
ILLUSTRATED LONDON
NEWS
SPHERE GRAPHIC
LONDON OPINION
VOGUE BYSTANDER
ILLUSTRATED SPORTING
and DRAMATIC NEWS

THEREFORE LOOK TO YOUR STOCK
AT ONCE—IF YOU HAVE NOT YET
BEEN ASKED FOR "CUTEX"
NAIL PREPARATIONS YOU SOON
WILL BE.

"CUTEX" CUTICLE REMOVER
" NAIL WHITE
" VARNISH
" CUTICLE COMFORT
" NAIL POLISH CAKE
" " PASTE

18/-
Per Doz.

HENRY C. QUELCH & CO.,
4 & 5 LUDGATE SQUARE,
LONDON, E.C. 4

OR ANY WHOLESALE HOUSE.

Enolin

TOOTH PASTE

"STRONG" OR "MILD"

The Super Paste

If your wholesaler has not sent you sufficient advertising matter for window display, drop us a postcard and we will send you a good assortment, post free.

SOLE MANUFACTURERS & PROPRIETORS:

A. & E. CARRERAS, *Perfumers*,

Offices : 207 King St., Hammersmith, London, W.6.

Telephone :
HAMMERSMITH 600

Telegrams :
"ESOLINDOL, HAMMER,
LONDON."

THREE GOOD SELLERS THAT PAY WELL

FROZOCLONE

(The original solid Eau de Cologne).

(Regd.)



THE WORLD'S GREAT
PERFUME AND
REFRESHER IN
SOLID FORM

Retails (P.A.T.A.)
Minimum - 3/-
giving at least 10d. Profit
on each sale.
26/- per doz.

FROZOCLONE is a convenient form of the finest Eau de Cologne, refreshing when rubbed on the forehead, equally pleasant as a smelling bottle, invaluable in a heated atmosphere and when motoring.

CARNATE (Regd.).

A NAIL POLISH PASTE with new and distinctive features. Antiseptic—Softens the cuticle—Brilliant and lasting polish.

Retails (P.A.T.A.) minimum 1/6; 12/- per doz.

ANALAX

(Reg. Pat. No. 310716).



The Ideal Fruity Laxative in Pastille Form.
DELICIOUS. RELIABLE. EFFECTIVE.

Retail (P.A.T.A.) Minimum 2/3
21/- per doz., stamped.

R. DEMUTH'S LABORATORIES, 68 Salusbury Road and
Montrose Avenue, LONDON, N.W. 6

Telegraphic Address : "Boulbene London."

Telephone : 525 Willenden.

Two of the Golden Series

OUR large National Press campaign has created a huge demand for our famous Golden Series.

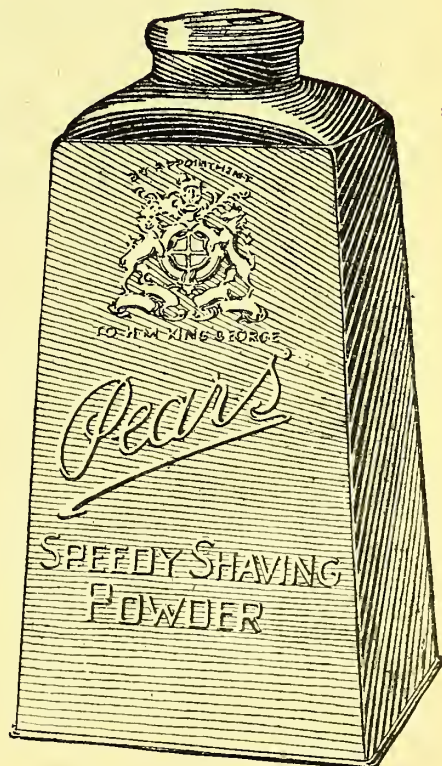
Here are two specimens from the series, receiving great prominence in the press throughout the country, and the demand for them is growing daily, *especially* where prominent display is given.

Please place your order well in advance of usual requirements as each one is dealt with in rotation.

**The protected retail prices are :
Pears' Opaque Shaving Stick 1/-
Pears' Speedy Shaving Powder 1/3**

A. & F. PEARS, LIMITED,
71/75 New Oxford St.
London, W.C. 1.

Pears



BIDWELLS' LTD.

RELIABLE TOOTH BRUSHES.

Gloria Silverdrawn,	18/-
Mitre - - -	14/-
Elephant - -	12/-
Anchor - - -	10/-

GROSS LOTS NAMED FREE. CARRIAGE PAID.

*We invite you to try them.
We guarantee satisfaction.*

A selected £10 parcel of Hair Brushes from 30/- to 100/- per doz., carr. paid.

Made at our Factories, AXMINSTER, DEVON.

The 5/- Size of

CALVERT'S

CARBOLIC

Tooth Powder

can now be supplied as well as the 6d., 1/- and 1/6 tins.

Price List on Application.

F. C. CALVERT & CO.

MANCHESTER

The Dancing Craze

Hot weather, holiday boom, and our advertising, are creating a big demand for

DULC-O-DO

the harmless toilet water which corrects excessive perspiration and makes dress shields unnecessary.

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Minimum Retail 2/6.

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Phone: 77 Willesden.



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sell at lowest prices, guaranteed quality, **CALL NUTS, LOOFANS, MENTHOL, DANDELION ROOT, PEPPER-MINT OIL, CHILLIES, CAMOMILES** and other **DRUGS** and natural products.

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manufacture and ship all kinds of **BRUSHES** (both formerly operating as the FUJI BRUSH COMPANY).

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 NOW!

EXPENSIVE MODEL LENT FREE.

This beautifully coloured figure, standing 24 inches high, will be sent securely packed in crate, carriage paid, to every chemist purchasing **Ker-nak Pills to the value of 50/-**. These will be supplied on the usual Window Show Terms of 5 per cent.

The only stipulation is that, after 2 weeks' show, the Ker-nak Boy must be sent to a new address which will be supplied.

ORDER FORM.

NAME

Address

Date

To Messrs. C. E. Fulford, Ltd., Carlton Hill, Leeds.

Please send "Ker-nak Boy." I agree to give 2 weeks' window display, and forward the figure (carriage at your expense, to a new address which will be supplied. I enclose order which includes at least 50/- value of Ker-nak.

Yours truly,

Signature

PRICES OF KER-NAK: 1/3 size, 12/6 doz.; 3/- size, 28/- doz. (Minimum Prices Face Value)

OWING to the cost of Raw Materials having advanced very considerably, we are compelled to increase the prices of

"Peerless" & "Elite" ERASMIC SOAPS

The retail price is now
6 $\frac{1}{2}$ d. per tablet. **1/7 $\frac{1}{2}$** per box.

"ERASMIC," Perfumers, WARRINGTON

The two quick SELLING LINES with a good profit.

ANZORA CREAM for those who have a slightly greasy scalp, and

ANZORA VIOLA for those who have a dry scalp as it has a sufficient quantity of Anzora Oil of Violets to overcome scurf and dandruff, both

MASTER THE HAIR.

TRADE 11/6 per dozen ... retailed at 18/-
TERMS 19/6 " ... " 30/-

2 $\frac{1}{2}$ % discount on orders of 3 doz., and
5% discount on orders of 6 doz.,
providing account is settled monthly.

Obtainable from
all Wholesalers.

Showcards
on request.

Anzora Perfumery Co., Willesden Lane, N.W. 6.

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La-Rola Rose Bloom

TO YOUR STOCK AT ONCE,

as it is being largely advertised in the
"Daily Mail," "Mirror," "Sketch," etc.

Do not lose the business
through being out of stock.

It is the most natural tint on the market,
and is selling well wherever introduced.

Lait La-Rola & Glycerine & Cucumber
supplied as usual.

All these articles are protected at FACE VALUE.
Write for Display Terms and save 10%.

M. BEETHAM & SON, Cheltenham.

SAVE 3/- PER GALLON BY BUYING GUARANTEED GENUINE NEWFOUNDLAND NON-FREEZING MEDICINAL COD LIVER OIL OF NEW SEASON'S MAKE.

Highest possible quality in smell, taste and colour, comparing most favourably with the finest Norwegian. Manufactured from the finest fresh Cod Liver on same day as fish caught.

WHOLESALE ONLY.

Kindly write for sample to

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LIMITED

beg to announce the following alterations to the Retail Prices of their

**SWEET PEA BLOSSOM,
NIGHT-SCENTED STOCK,
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New Prices	-/6	2/6	4/-	5/9	8/3	17/6	35/-

EAU DE COLOGNE.

Old Prices	1/3	2/6	4/6	7/9	8/6	14/6	27/6
New Prices	1/6	3/6	6/6	11/-	12/6	21/-	40/-

N.B.—There has been no alteration to the Wholesale or Retail Prices of

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To be Sold by Public Tender,

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Ex Solferino, lying Newcastle-on-Tyne.

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Ex Germania, lying Swansea.

Tenders in envelopes marked "Tender for Talc Powder," and addressed to the Admiralty Marshal, Royal Courts of Justice, London, W.C.2, must be received not later than noon on Tuesday, 17th June, 1919. Samples may be seen and particulars obtained from Surveyors of Customs and Excise at Newcastle and Swansea, or at the Admiralty Marshal's Office.

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TOOTH BRUSHES.

	Assortment	B	C	D
Bone handles, 4 rows	per doz.	8/-	9/-	10/6
Celluloid "	"	9/6		

SHAVING BRUSHES.

Bone handles, hog hair	per doz.	16/-
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Satinwood back, real whalebone, 5 rows	per doz.	33/-
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5% discount allowed for prompt cash off above prices.

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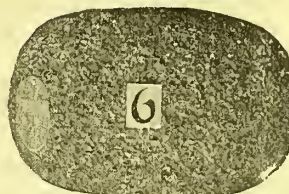
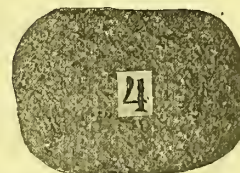
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SUNDRIES
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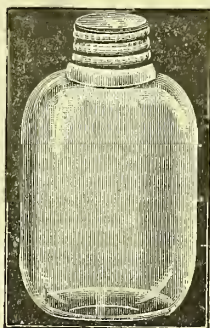
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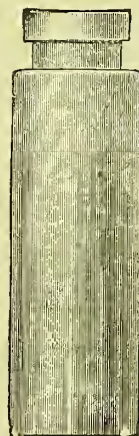
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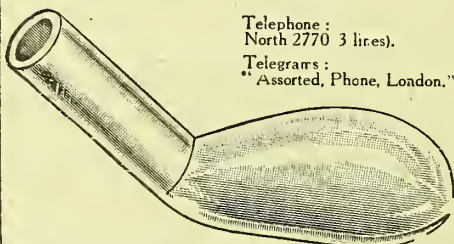
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St. John Street, Clerkenwell, LONDON, E.C. 1, from

MONDAY to FRIDAY, JULY 14 to 18, 1919

11 a.m. till 9 p.m. Daily.

The Northampton Institute is situated in St. John Street, Clerkenwell, London, E.C. Trams and motor omnibuses from all parts pass the entrance, and the Hall is within five minutes' walk of two railway stations, viz., "The Angel" on the City and South London Railway, and Farringdon Street Station on the Metropolitan Railway, which two lines are linked up with all the great London termini, so that from the point of view of easy access from all parts of the Metropolis the situation of the Hall is unique. The two Halls in which the Exhibition will be held are handsome structures and in every way well adapted for an exhibition of a high-class character.

Wholesale Houses, representative of every section of the trade, have taken space, and the Exhibition promises to be of the greatest interest to all practising pharmacists, and will well repay a visit.

RAILWAY REBATES FOR SUBSCRIBERS.

Every Retail Chemist in business in the United Kingdom who is, or becomes before July 7th, an annual subscriber to the "British and Colonial Pharmacist," is entitled to a rebate from the cost of his return ticket to London, whether he pay ordinary fare or excursion fare. The maximum rebate will be £1 off third-class fare. For example, the return third-class fare from Bristol is £1 9s 4d. We pay half, and the chemist subscribes the balance. Where the fare exceeds £2 we limit our payment to £1. Notice of intention to claim this rebate must be received at these offices not later than July 7th, the Monday before the opening of the Exhibition, in order that the necessary lists may be prepared. In no circumstances will Railway Rebates be paid unless we have received a claim on or before this date. The amount is paid during the Exhibition in the

"B. & C. P." Reception Room on production of return half of railway ticket.

Every Chemist is entitled to two tickets of admission free of charge, on applying to the Secretary at 194-200 Bishopsgate, London, E.C. Exhibiting houses will also be pleased to send tickets to their customers on application.

"B. & C. P." Reception Saloon.—A handsome Room, adjoining the main entrance, will be reserved for the reception of our subscribers, where the members of the staff will be pleased to meet them, and where, as in previous years, light refreshments will be provided.

A Writing and Reading Room will also be arranged where chemists and their friends can meet in comfort, and where light refreshments will be provided at moderate prices.

Colonial Pharmacists now in this Country are cordially invited to visit the Exhibition.

Any further information can be obtained from the "British and Colonial Pharmacist" Offices, 194-200 Bishopsgate, London, E.C., on application to the Secretary.

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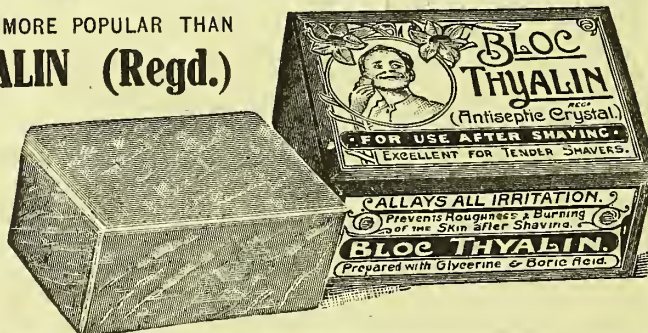
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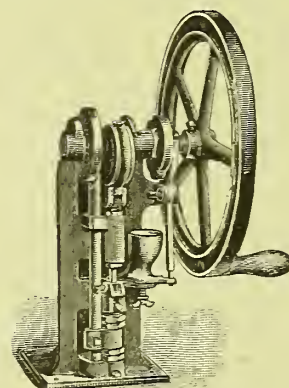
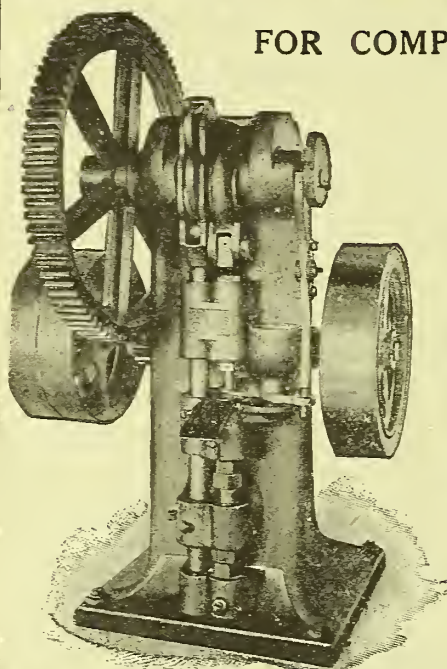
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Per dozen Rolls	...	...	per doz.	16/- net.	Per dozen Packets	...	...	per doz.	17/6 net.
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A Gillette sale means a satisfied purchaser. Our guarantee insures that. Therefore every Gillette you sell secures you a permanent customer—he will always use the Gillette blade after one trial.

Gillette

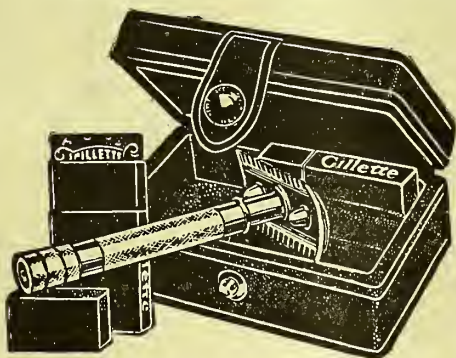
SAFETY RAZOR

Over 15,000,000 men are shaving the Gillette way and the number is increasing every day. Our advertising is sending new customers to dealers everywhere—stock them—give them “window space” and reap the benefit of the demand.

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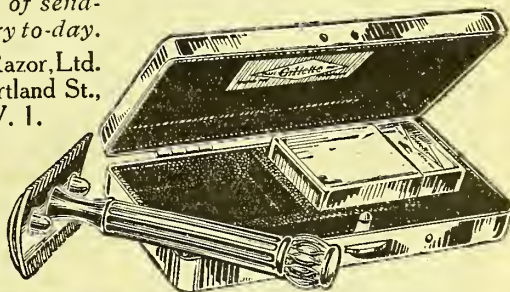
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In Ucal you have 'something new' to Pharmacy—collective consciousness.

Here you find men with ideals and men with ideas—the thinkers and the executives. But the truly surprising thing is to find these men working together to a common purpose—each from his own angle and in his different way is working to one great end—'Pharmacy for the Pharmacist.'

Ucal is the Bond of Union.

Ucal is even more than that—it is the means, the way to the great end.

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UCAL, Cheltenham.

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Retail	THE NEW HAIR TONIC	Retail
Price	LYSOLINE as a dandruff remover is unrivalled—makes straight, greasy hair bright and wavy—will bring you plenty of repeats and recommendations.	Price
1/6		1/6
Shows you 100% Profit.		

Send for the Special Offer Parcel with Showcards, and give it a **WINDOW DISPLAY**. We guarantee you good results. It repeats and recommends itself. N.B.—This offer only holds good if sent by June 30, 1919

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The CHEMIST AND DRUGGIST is in circulation and reputation the leading journal addressing the Chemical and Drug trades in the British Empire and other countries in the Old and New Worlds. It is the official organ of the Pharmaceutical Society of Ireland, the Chemists and Druggists' Society of Ireland, and of many Chemists' Societies in Australia, New Zealand and South Africa.

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FIFTEEN SHILLINGS a year payable in advance to any part of the world, including a copy of *The Chemist and Druggist Diary*. Subscriptions may begin with the first issue of any month. Single Copy, 6d.; *Diary* 3s. 6d. post free. Postal orders and cheques should be crossed "Bank of Liverpool and Martin's Ltd."

Prix de l'abonnement annuel: le journal une fois par semaine, et l'agenda une fois par an, 15s., franco.

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Head Office: 42 CANNON STREET, LONDON, E.C. 4.

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CONTENTS: No. 24 (Series No. 2055), Vol. 91.

PAGE	PAGE
Association Affairs	78
B.P. Notes	58
British Soap Exports	65
Business Changes	77
Chemical Society	67
Colonial and Foreign News	62
Coming Events	57
Corner for Students	66
Correspondence:	
Letters	86
Subscribers' Symposium	87
Dispensing Notes	87
Legal Queries	88
Miscellaneous Inquiries	88
Deaths	69
Editorial Articles:	
Registration of Pharmacy	72
Schools	72
Chemists and Dental Practice	73
"The Unjust By-Law"	74
The Position of Quicksilver	74
Medical Dispensing	75
Overseas Trade in May	75
English News	59
Experiences of the Great War	57
Festivities	78
Foreign Trade of India	80
French News	62
Gazette	76
Import and Export Relaxations	82
Information Department	70
Insurance Act Dispensing	77
Irish News	60
Is Insurance Dispensing Profitable?	77
Legal Reports	63
Marriages	69
Maw's "Victory Day"	81
New Companies and Companies' News	63
Observations and Reflections	71
Organising the Drug-trade	67
Personalities	68
Pharmacy in the Italian Army	64
Practical Notes	79
Pyrophoric Alloy Industry	73
Quinine Contract	82
Retrospect	88
Scottish News	61
Society of Public Analysts	69
South African News	67
Technical Education in Ireland	68
Trade-marks	63
Trade Notes	70
Trade Report	83
Westminster Wisdom	76
Wills	77

Coming Events.

Monday, June 16.

Sheffield Panel Chemists.—Literary and Philosophical Society's Rooms, Church Street, at 8.30 p.m. Discussion of Insurance Dispensing and presentation of annual report.

Thursday, June 19.

Chemical Society, Burlington House, Piccadilly, London, W., at 8 p.m. Informal meeting.

BIRMINGHAM PHARMACEUTICAL ASSOCIATION.—An excursion by motor 'bus to Kenilworth, Warwick, and Leamington has been arranged for July 2. Rendezvous opposite Queen's College, Paradise Street, at 2 p.m. Tickets for 'bus and tea (10s. 6d. each) from Mr. F. Smith, 221 Soho Road, Birmingham.

BRADFORD PHARMACISTS' ASSOCIATION.—A motor char-a-banc trip to Fountains Abbey and Studley Royal has been arranged for July 2. Information from Mr. A. T. Bailes, Hon. Secretary.

NATIONAL ASSOCIATION OF WOMEN PHARMACISTS.—The annual business meeting will be held at 17 Bloomsbury Square, London, W.C., on July 2, at 7 p.m.

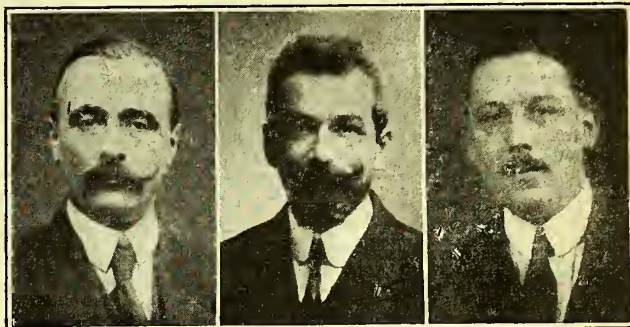
THE FEDERATION OF BRITISH INDUSTRIES is organising a British Manufacturers' Exhibition in Athens, to be held in October and November next. Toilet requisites, soaps, etc., fertilisers, and chemicals generally are badly wanted in Greece.

Experiences of the Great War.

Contributions to this section are invited.

VIII.—"Carrying-on" in France.

SOME fifteen years ago two young French pharmacists, MM. Marchand and Leroy, opened in Rheims one of the first commercial pharmacies to be established in France. In spite of much opposition from their *confrères*, the venture proved a great success. The scientific side was also developed largely, so that, when the war broke out, the Grande Pharmacie de Paris, Rheims, with a staff numbering over fifty, including highly-trained analysts and technical chemists, and a splendidly equipped laboratory, was considered to be one of the finest and best organised in France. M. Leroy was immediately called up, and left to join his regiment, whilst M. Marchand, who had always been in poor health and was rejected on volunteering, remained. The rapid German advance found Rheims in the hands of the enemy. The business was carried on, and a large quantity of the huge stock was commandeered. The



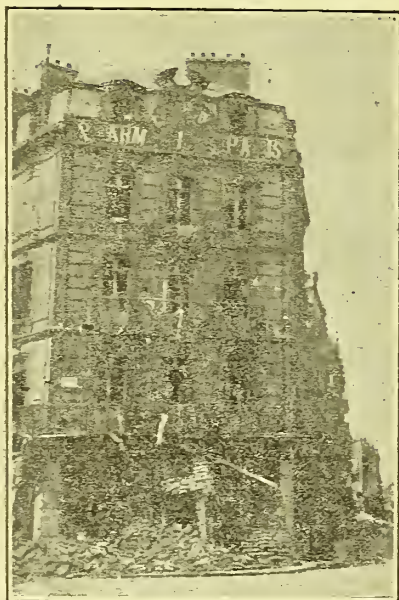
M. LEROY.

M. MARCHAND.

MR. STANLEY S. BALCH.

Germans behaved fairly well on the whole to the people of Rheims, but, when obliged to retreat, took a number of the principal citizens as hostages. M. Marchand hid until that danger had passed. Then the serious trouble began. The Germans, being on the heights about a mile from the suburbs, had complete command of the city, and began shelling the place. Everyone knows the fate of the cathedral. M. Marchand pluckily remained, always hoping for the best, and business was carried on until February 1918, when, after the building had been hit and damaged many times, fire destroyed what was left of it. M. Marchand decided, in 1916, to open a pharmacy on the same lines at Amiens, and took large commanding premises for that purpose at the corner of the Place René Goblet and Rue des Trois Cailloux, leaving M. Leroy, who had been invalided out of the Army, at Rheims. The first battle of the Somme took place about this time, and Amiens became a most important centre for the British armies. The author (Mr. Stanley S. Balch, M.P.S.), who holds the Mons Star, and who was for many years with Roberts & Co., Paris, was invalided out of the British Red Cross Society and joined M. Marchand to manage the English side of the business. Under his guidance this grew to an extent undreamt of perhaps in pre-war days, and became known to thousands of all ranks, as did so many other businesses in Amiens. People had confidence, and shops and warehouses were packed with goods. Air-raids were few and far between, and everybody reaped rich rewards for any enterprise undertaken. On March 21, last year, a severe air-raid scared the people, and a week later a worse one did enormous damage, completely wrecking the handsome frontage of the English and American Pharmacy. Thousands began to leave the city so early as 5 a.m. Mr. Balch, who had been sheltering in the cellars of Cox's Bank with the manager, Mr. Stickland, in a street about fifty yards from the pharmacy, ran out after the bombing ceased and found the road littered with the contents of the windows, and, sad to relate, a few unscrupulous persons picking up litres of eau de Cologne, badger-hair shaving-brushes, and other toilet articles to keep as souvenirs. At 4 a.m. Mr. Balch went to M. Marchand's residence and found him sleeping quite unconcernedly. They returned and started to clear up the broken glass and smashed woodwork, with the intention of carrying on as usual, but the panic had set in and the staff were advised to move to safety. The dispensary presented a pitiful appearance, scarcely a bottle remaining on the shelves.

The poison-cupboard had been forced open by the concussion, and the contents lay in a mass on the floor. Curiously enough, a few of the more expensive alkaloids were unharmed. In the drug stock-room, 14-lb. jars had been hurled off the shelves and lay smashed on the floor; the surgical rooms, office, and *herboristerie* suffered from splinters and fallen plaster: the whole building was filled with dust and all was in disorder. M. Marchand, with his usual calm, surveyed the situation and, after making a few inquiries in the city, decided to remain and carry on. He immediately got help to restore a little order and clean up the rubbish, but thought it prudent to send away Mr. Balch for safety's sake, as it was feared the Germans would enter Amiens within forty-eight hours and would take Mr. Balch prisoner. After removing the valuables and some personal effects to Paris, M. Marchand returned to Amiens three days afterwards and continued to do a big business under great difficulties. Then the Germans, having been held up, commenced to shell the city, and orders were given for evacuation of the civil population, many of whom would cling to their dangerous homes and had to be forcibly taken away. The authorities asked that the pharmacy, being the only one open, should continue, and special permits were granted by the military for M. Marchand, his nephew, M. Godart, Mr. Balch, and five or six girls and men, who were evacuated from the Rheims business a few weeks before, to carry on. These people, after having had over three years' experience of shelling, thought they were out of danger, but found that this was not the case. They decided to remain, but as the shelling daily grew in intensity all passed a very anxious time. The pharmacy was



THE AMIENS PHARMACY AFTER BOMBARDMENT.

sandbagged up to a height of 10 feet. This was carried out by a gang of men who, whilst filling the bags with earth, were almost buried by a shell which fell in the gardens close to them. They, however, finished the job, which was done at a cost of over 200l. The sacking was bought in Amiens; the receptacles were made by women, who worked night and day, and many compliments were paid by officers, who said they had never seen better bags. As time wore on the danger increased, and, reluctantly, it was decided to pack up the stock and move it to a safe place. This was commenced in April, and it was completed by the end of May. Over 2,200 cases of goods were placed on rail, filling twenty-three 20-ton railway wagons. The stock was greatly augmented by the material from Rheims, which had arrived at Amiens a few weeks before the premises there were destroyed. This, however, gave little trouble, as all was ready for removal. The military authorities, seeing that the city was being gradually destroyed, rendered every assistance, and quite a gloom was cast over the courageous people at the pharmacy when, one bright May morning, a shell fell on the stables, where two splendid soldiers were harnessing their horses to begin removing goods to the station some miles away,

blowing them, with their horses and limbers, to pieces. The wonderful cheerfulness and fearlessness of M. Marchand encouraged and inspired not only his own staff, but others in distress, and finally, at the end of May, practically all of real value had been moved to a safe place. Great help was given by the Australians, and the pharmacy was so well known to them that they were eager to get the stock away as quickly as possible. During the shelling frequent halts had to be made to take refuge in the cellars, as occasional splinters came through the windows. The sandbags were only in position about two weeks when, hit by a shell, they were partially demolished. During the shelling of the railway station many casualties occurred, and a busy time was experienced, many minor dressings being done at the pharmacy. The city was out of bounds for all troops, and the inhabitants who had to remain relied on the military for sustenance. No letters were received for several weeks, and it was difficult to communicate with the outside world. The staff slept in cellars under the pharmacy, with the continual dread of gas-shells or of being buried under *débris*: but all were actuated with the desire to complete the task and see it through. The splendid example of M. Marchand kept all in good spirits, and many a joke was made whilst shells were whining overhead.

Many references were made in the Press to this pharmacy, and a descriptive article by Hamilton Fyfe, entitled *Amiens in its Darkest Hour*, appeared in "The War Illustrated" of September 1918. The "Daily Express" also described the business in November, whilst "The Times," "Le Matin," and several other papers commented on the utility of this pharmacy. Perhaps it is no exaggeration to say that Mr. Balch is the English chemist best known to the British Army. To find an Englishman in Amiens was a great relief to many who came for a day's leave or to make purchases. MM. Marchand and Leroy are perhaps the only chemists who have had the ill-luck to have two businesses destroyed in the war. The premises are being rebuilt; in the meantime the staffs have all moved to Boulogne, where a flourishing business is carried on under the same guidance. The energy of these two men, in spite of the anxious times, remains unabated. They believe in hard work and plenty of it, and in self-help, not relying on State or other aids which may or may not come.

STANLEY S. BALCH, M.P.S.

B.P. Notes.

By "Abel Scholar."

Sulphur Sublimatum.

In the monograph for sulphur sublimatum no mention is made of the limit of insolubility of sulphur in carbon disulphide. It is variously stated to be from three to five or more per cent. As it has been suggested that the amount of sulphur present in pulvis glycyrrhizæ compositus could be ascertained by noting what quantity of it is dissolved out by carbon disulphide—i.e., the amount of the carbon disulphide extract—a measure of its accuracy could be arrived at. The B.P., however, gives no test for pulvis glycyrrhizæ compositus, and workers have to rely upon the several methods which have been published by analysts and others from time to time.

Glycerin Questions.

To what official use is glycerinum tragacanthæ put? Glycerin and tragacanth are present side by side in several preparations—e.g., conf. sulphuris and pilula quininae sulphatis—but the proportions of each ingredient do not agree with the first-named nor between themselves in the two examples. Why cannot the glycerin of tragacanth be ordered for them? It is much more expeditious to use glycerin of tragacanth for the quinine pill, using 15 grams, or even less, for the official quantities, and to maintain the percentage increasing the quantity of the quinine salt. It may be noted that where in the 1898 B.P. tragacanth and glycerin were used—e.g., pilula ferri—their place is now taken by tragacanth and official glucose. Would it not, therefore, be well to introduce a formula for such a mixture as this under the name of gluco-tragacanth if such is not already in daily use in the dispensary? In this connection may it be asked, Does syrup of glucose possess any advantages over the official glucose in the preparation of pills and for other official purposes?

English and Welsh News.

The Editor would be obliged if subscribers would send him marked copies of newspapers containing items of interest for insertion in this or other news sections of the "C. & D."

Society of Chemical Industry.

The annual general meeting is to be held in London on July 15, 16, 17, and 18, when the office and headquarters of the Society will be at the Hall of the Salters' Company, St. Swithin's Lane, E.C. 4. The meeting is to be held at the Mansion House, when the members will be welcomed by the Lord Mayor, after which an address will be given by the President, Professor Henry Louis, D.Sc. A luncheon will be held at the Connaught Rooms, Great Queen Street, Kingsway, by invitation of the London section. In the afternoon a conference of the Inter-Allied Chemical Federation will take place at the Mansion House under the Chairmanship of Sir William Pope, F.R.S., President of the Chemical Society. At 8.30 a *soirée* and reception will be held at the Imperial College of Science and Technology, South Kensington. On Wednesday and Thursday conferences will be held at the Salters' Hall; on Wednesday evening the annual dinner will take place at the Savoy Hotel, Strand, W.C.; and on Thursday evening there will be a reception at the British Scientific Products Exhibition, Central Hall, Westminster. Friday, July 18, is to be devoted to an excursion to Windsor and Taplow. The Hon. Secretary and Treasurer of the London Executive Committee is Dr. Stephen Miall, Central House, 47 Finsbury Square, London, E.C. 2, to whom application for tickets should be made.

Fuel and Lighting Restrictions.

The Controller of Coal Mines announces that it has been found necessary to continue the rationing of coal, gas, and electricity for household fuel and lighting for a further period. It is, however, proposed to modify the present order to the extent that consumers of less than five tons of coal in the year, 12,500 cubic feet of gas in any quarter, and 400 B.T.U.s of electricity in any quarter will not be subject to assessment. They must, however, be registered with their coal merchants for the supply of coal. A revised Order, which will take effect from July 1, will be issued during the present month. In the meantime, the following memorandum is issued:

(1) Anthracite, coke and parent fuel will be exempted from the Order for the time being.

(2) All consumers of coal must register with coal merchants for their supplies. Present registrations will be valid unless notice to the contrary is given by either consumer or merchant.

(3) The present assessments are current for a year from various dates commencing with October 1, 1918. In the case of consumers over the quantities named above, the assessments will be renewed for the same annual quantity for twelve months from July 1, 1919, and the balance of the old assessments cancelled.

(4) New certificates will be issued to all present holders of certificates for the twelve months' supply, and it will not be necessary to make application for the certificates, except in the case of new consumers or of those who, owing to a change in the basis upon which the original assessment was made, desire a modified assessment.

(5) The new assessments and certificates will date from July 1 in order to enable private consumers, so far as coal may be available, to stock on account of the coming year's allowances. Immediately on the issue of the new Order, arrangements will be made to enable this to be done during the months of July, August, and September.

(6) The supply of fuel already made under any existing certificates in respect of the period subsequent to June 30 will be treated as a supply on account of the new year's allowances.

(7) The conversion equivalents of gas and electricity in terms of coal will be fixed at: 18,750 cubic feet of gas to the ton of coal; 1,000 B.T.U.s of electricity to the ton of coal.

(8) The control of maximum prices for the sale of coal, will be rigidly enforced.

(9) In order to simplify some of the machinery and provisions of the present Order, the special Local Fuel and Lighting Committees will be discontinued, and, in the ordinary course, the control of the local fuel overseer will

subject to the directions of the Controller, be left to the local authority—except in the Metropolitan division, which will continue under the immediate supervision of the Household Fuel and Lighting Branch of the Coal Mines Department.

Guardians' Affairs.

The Cardiff Guardians have appointed Miss M. Ingledew dispenser at the City Lodge.

The Sheffield Guardians have applied the new conciliation and arbitration award to their dispensing staff.

The Helston Guardians have accepted the tender of Mr. J. P. Trestrail, chemist and druggist, Porthleven, for drugs.

Birmingham.

A local firm had a case of goods collected by a certain railway company; the case was brought back a few days later, with a message that the route was closed at present.

Mr. Jeffrey Poole, chemist and druggist, who is chairman of the Birmingham Baths Committee, has been instrumental in securing labour-saving apparatus for public baths.

One of our local pharmacists who went hunting this Whitsuntide was asked if he had had any luck. He answered: "Simply wretched. Didn't kill a thing. I am sorry I didn't go motoring instead!"

Captain (Acting Major) F. B. Winfield, R.A.M.C., has been appointed an Officer of the Order of the British Empire for his services in France. Captain Winfield, who is the son of Mr. G. F. Winfield, pharmacist, Seibull, has been mentioned in despatches (C. & D., 1918, p. 41).

On June 2, the Alchemy Lodge, No. 3,950, was celebrated in the Masonic Hall, Severn Street, by the Right Worshipful Brother Col. W. F. Wyley, D.L., V.D., P.S.G.D. Eng., Provincial Grand Master, Warwickshire, assisted by the Very Worshipful Brother Rev. Canon C. W. Barnard, M.A., P.G. Chap. Eng., Deputy Provincial Grand Master, and other well-known Provincial Grand Officers. The ceremony was well attended by pharmaceutical Masons. In the course of the proceedings, the Grand Master referred to the choice of Worshipful Brother Thomas Barclay, P.M. 887, as the first Worshipful Master of the Alchemy Lodge. Officers appointed were as follows:

W.M., Wor. Bro. Thomas Barclay; L.P.M., Wor. Bro. Fred Barlow; S.W., Wor. Bro. F. J. Gibson; J.W., Wor. Bro. Maurice Smith; Chaplain, V. Wor. Bro. Rev. Canon Barnard; Treasurer, Wor. Bro. A. W. Gerrard; Almoner, Wor. Bro. Thomas Mason; Secretary, Wor. Bro. F. C. H. Foster; D.C., Wor. Bro. I. M. Withers; A.D.C., Wor. Bro. R. H. Hume; S.D., Wor. Bro. C. E. Ison; J. D., Bro. J. W. Shields; Organist, Bro. F. J. Gill; Asst. Sec., Bro. J. Robinson; I.G., Bro. W. E. Hiphis; Sen. Steward, Bro. J. W. Dixon; Jun. Steward, Bro. C. B. Baker; Asst. Stewards, Bros. W. H. Fletcher and R. E. Howard.

The Provincial Grand Master, the Right Worshipful Brother Col. W. F. Wyley, was unanimously elected the first hon. member of the Lodge. The ceremony was followed by a banquet. The second meeting of the Lodge is to be held in September.

Liverpool.

Hair-tonics form a popular display.

Face-cloths are a comparatively new and growing article of sale.

"Secure saccharin and save sugar," reads a window-bill now in evidence.

Generally speaking, retailers report brisk business; but in a few cases there is a slackening.

The sixty-ninth annual report of the Liverpool Chemists' Association has just been issued in pamphlet form. It includes the balance-sheet, rules, and list of members.

Mr. Parkin S. Booth, accountant to the Association of Manufacturing Chemists, Ltd., has been elected President of the Liverpool branch of the Association of Certified Accountants.

The Whitsuntide holiday has witnessed a record number of people entering and leaving the city. In the wholesale trade the vacation covered two or three week-days, but retailers barely secured the Bank Holiday.

A social evening, organised by the students of the Liverpool School of Pharmacy, was held at the Gainsboro' Café on June 4. Mr. J. Leonard was the initiator of the function, and is to be congratulated on its success. Mr. Humphreys Jones (Principal), Mrs. Jones, and Mrs. Moreton Parry were present. The following contributed to the programme: Miss Faulkner, Messrs. Leonard, Llew, Jones, Lumby, Edwards, and Boggiano, the last-named officiating as M.C.

Sheffield.

Business is very much easier during the last two or three weeks.

Any chemist wishing to accept a student or improver from among demobilised soldiers (under the Ministry of Labour scheme) should forward his name to the local Secretary, Mr. Bown.

Miscellaneous.

POISON-LICENCE APPLICATION.—H. Perinc (trading as Riley Bros.), tobacconist, Ulverston, has applied to the Lancs County Council for a licence to sell agricultural poisons.

FIRES.—Damage estimated at £20,000. is reported to have been caused on June 5 by an outbreak of fire at the Bush Chemical Works, Stratford, Essex.—A fire, caused by the ignition of some phosphorus, broke out on June 7 on premises at 33 Brooke Street, London, E.C. 1, occupied by Mr. R. E. Alison, analyst. The damage was slight.

THE OPTICAL BRANCH of the Ministry of Munitions has been transferred to the Board of Trade, and the latter will deal with questions of assistance to, and organisation of, the optical scientific instrument, glass, and potash industries, including administration of the Glass Control (Consolidated), Clinical Thermometer, and Potassium Compound Orders. All communications relating to such questions in future, therefore, should be addressed to the Assistant Secretary, Board of Trade, Industries and Manufactures Department, Scientific Instruments, Glassware, and Potash Production Branch, 117 Piccadilly, London, W. 1.

INQUEST.—In the course of an inquest held in Kensington, London, W., on the body of Mrs. Lily Kennard, Cecil Court, it was stated by the husband of the deceased that she came over from Brazil in April in delicate health, and he went to the Alabone Institute, in Highbury Quadrant. Mrs. Kennard filled up a form, and they supplied her with apparatus for spraying the throat, and gave medicine. He paid 12/ 12s., but she was never seen by anyone from the Institute. Dr. B. H. Spilsbury, giving evidence, said that he had seen the deceased's papers from the Alabone Institute, and considered the treatment quite inadequate for one in her condition. The Coroner recorded a verdict that the death from heart disease and emaciation consequent on tubercular disease was accelerated by want of appropriate medical and surgical treatment.

POISONINGS.—At an inquest held at Leigh, Lancs, on May 31, on the body of Charles Joynt, a dispenser at the Leigh war-prisoners' camp, evidence showed that he had taken home some chlorodyne in order to induce sleep. A medical witness having stated that the symptoms observed were those of opium poisoning, a verdict of "Death from misadventure" was returned.—A recent North London inquest, at which evidence was given to the effect that the deceased, a Mrs. Munton, had taken a very large quantity of spirit of salt in mistake for medicine, was adjourned.—An inquest was held at Barton Farm, Wiltshire, on June 2 and 4, on the body of an old gardener named Gooding. Medical evidence showed that death was due to hydrocyanic acid or to a cyanide, but no information as to where the poison was obtained was available. An "Unsound-mind" verdict was recorded.—A Marylebone man named Brushmeyer committed suicide by taking spirit of salt.

DISRUPTION OF ATOMS.—At the Royal Institution on June 6 Sir Ernest Rutherford, lecturing on "Atomic Projectiles and their Collisions with Light Atoms," said he obtained evidence of the disruption of atoms by the impact of the swift alpha-particles shot out by radium C. The

evidence is as follows: When one of these alpha-particles hits the nucleus of a light atom like that of hydrogen in a head-on collision, the atom is pushed on a certain distance more or less in the line of motion of the particle. A heavier atom, like that of nitrogen, is not pushed so far; yet when the experiment is tried on nitrogen a few atoms are found that go as far as hydrogen atoms, and in fact appear to be hydrogen atoms. The possibility that the hydrogen comes from external sources seems to be disproved by the precautions taken, and in that case it must come from the nitrogen. The lecturer was therefore led to the speculation that the nucleus of the nitrogen atom is made up of three atoms of helium and two of hydrogen, and that the hydrogen which made its appearance in his experiments was sent off the nucleus of the nitrogen atom by the impact of the alpha-particle.

IN THE COURTS.—At West London Police Court, on June 5, Herbert Clarence Leonard (27), Polimore Square, Exeter, described as a canvasser, was remanded on a charge of obtaining by false pretences the sum of 50/., and tooth-paste of the value of 16/., from the Enolin Tooth Paste Co., King Street, Hammersmith.—At Warminster Petty Sessions, on June 5, W. Jones, Horningsham, was fined 1/ for failing to notify a case of parasitic mange in a horse.—In the Court of Criminal Appeal, on June 5, the sentence of five years' penal servitude passed recently (*C. & D.*, May 3, p. 48) upon J. H. Ferrua (81), an Italian doctor, was reduced to one of two years' imprisonment on the ground of his state of health.—At Willesden Police Court, on June 7, Reginald Owen Bird (26), Stonebridge Park, London, N.W., described as a chemist and dentist, was charged with conspiring with William James & Co. to obtain by fraud from Lewis Pattison cocoa butter, value 540/., the property of the Long Eaton Working Men's Co-operative Society, Ltd. Evidence showed that the notepaper used in the transaction—a transaction ostensibly connected with Government contracts—bore a statement that the partners in "William James & Co." were "W. James, M.P.S., and R. O. Bird, M.P.S., F.C.S." When arrested, the prisoner said: "I held no Government contracts. There is no such person as William James. They are my father's Christian names, and I thought they would look better for business. I am sorry I used them." The police asked for a remand, as many inquiries were being made. Prisoner's solicitor asked for bail, but it was refused.—In Southwark County Court, London, on June 10, Arthur Ernest Ford brought an action against John Bell, Hills, & Lucas, Ltd., Tower Bridge Road, S.E., for compensation on account of illness contracted while in their employ. It was explained that the company handled gas-masks brought direct from the battlefields for renovation and repair. An eruption on Ford's skin was diagnosed as dermatitis, and he was ordered complete rest by the doctor. The Judge made a continuing award in Ford's favour, but said he thought he could do some work.

Irish News.

Brevities.

Mr. J. E. O'Neill, J.P., R.D., Maghera, Co. Derry, has been re-elected Chairman of the Magherafelt Board of Guardians.

Hayes & Hayes (Dartry Pharmacy, Rathmines, and Portumna, Co. Galway) have opened their third pharmacy at Dundrum, Co. Dublin.

At the recent annual meeting of the Ballymena Golf Club, Mr. J. A. Woodside, Ph.C., was appointed Vice-Captain for the ensuing year.

Under the scheme of the Joint Committee of the Red Cross Society and the St. John Ambulance Association, two motor ambulances, for hospital use, were brought from London to Lurgan during the week by Mr. A. W. Mann, Ph.C., and two chauffeurs.

At Ennis Quarter Sessions, before Judge Bodkin, William Walsh, described as a chemist, Milltown Malbay, was granted 12/ compensation (the full amount claimed) and expenses for the destruction of two iron shutters

which were subsequently found a considerable distance from the shop.

Chemists' Golf Match.

The annual competition for the McMullan Challenge Cup took place on Dunmurry Links, Belfast, on June 4. Perfect weather favoured the competitors, and the course was in first-class order. The forty entries were divided into two sections, and the best cards returned were the following:

Class A. 17 and Under.	Class B. 18 and Over.
J. C. Burkey ... 86-10=76 net	W. E. Rutledge 97-22=75 net
W. R. H. Orr ... 95-18=79 "	H. M. Poots ... 95-20=75 "
H. McRoberts 95-15=80 "	L. J. Woodside 94-18=76 "
A. W. Mann ... 96-16=80 "	A. Morris ... 99-22=77 "
Dr. McCulloch 91-10=81 "	L. T. Dobbin ... 104-22=82 "
T. W. Gibson 91-10=81 "	S. R. Anderson 101-18=83 "
A. Leitch ... 95-14=81 "	J. B. Breakey ... 105-22=83 "

The tie in Class B between Messrs. W. E. Rutledge and Mr. H. M. Poots was played over nine holes, and resulted in a win for Mr. Rutledge. In the final between Messrs. J. C. Burkey and W. E. Rutledge, Mr. Burkey finished two up, and thus wins the cup for the year. The competitors were afterwards entertained to tea in the clubhouse by Mr. H. G. Pring (Grattan & Co., Ltd.), and



Photo.]

[A. R. Hogg.

CHEMISTS' GOLF MATCH AT DUNMURRY.

at a subsequent short meeting votes of thanks to the Dunmurry Council for the use of the links and to Mr. Pring for his hospitality were passed. A nine-hole sweepstake resulted in a tie for first place between Messrs. A. W. Mann (Lurgan) and J. Beatty (Clones), with second place to Mr. S. Stewart. The following were elected for the year 1919-20: *President*, Mr. Wm. McMullan; *Chairman*, Mr. H. G. Pring; *Vice-Chairman*, Mr. W. J. Hardy; *Committee*, Messrs. A. W. Mann, J. Macauley, A. Morris, J. Dundee, F. Sharpe, and A. Wilson; *Treasurer*, Mr. H. McRoberts; *Hon. Secretary*, Mr. W. J. Rankin, jun.

Belfast.

At Cavan Quarter Sessions, on June 6, Peter Casey, who had been convicted of breaking a plate-glass window in the medical hall of L. & R. O'Connor, Cavan (*C. & D.*, May 31, p. 48), was sent to prison for two months.

Private R. D. Kerr (Acting C.Q.M.S. 10th Battalion Royal Irish Rifles), who has been awarded the Meritorious Service Medal for service in France and Flanders, was an assistant with Mr. J. P. B. Hay, Windsor Pharmacy, 138 Lisburn Road, Belfast, before he enlisted.

Mr. James Dundee, Hon. Secretary of the North Irish Pharmacists' Association, who wrote the Cemeteries and Parks Committee of the Belfast Corporation in respect to the formation of a herb garden in Botanic Park, has been notified that the Superintendent of Parks will inform him of the provision so far made, and will report whether any additions to the present herb-garden are considered desirable.

Scottish News.

Brevities.

Mr. R. Gordon Drummond, chemist and druggist, High Street, Falkirk, has opened a branch at Mary's Street, Laurieston.

The Chief Constable of Dundee has been instructed to communicate with other chief constables in Scotland with a view to imposing restrictions on the sale of methylated spirit.

A syndicate proposes to erect a sugar-beet factory at Stranraer. Experiments in Wigtownshire have proved that sugar-beet of higher content than in Germany or Austria can be grown there.

Mr. W. S. Glass, Edinburgh, whose name appeared in our last issue (p. 74) among the signatories to a letter announcing resignations from the North British Executive, informs us that he has not resigned from that body.

Messrs. George and John Morrison, chemists and druggists, have purchased the business of Mr. William Ogston, chemist and druggist, Union Street, Inverness, who is retiring from the trade after thirty-seven years' proprietorship of this pharmacy.

Mr. David Harley, chemist and druggist, 121 High Street, Musselburgh, has taken Mr. M. Harper, pharmacist, into partnership. Messrs. Harley & Harper have opened their new premises at 150 High Street as an optical and photographic branch.

The doctors in the shale area have addressed to the various trades unions a request for an advance of the flat rate for attendance and medicines from 3d. to 4d. a week per workman; 21s. instead of 10s. 6d. for attendance at confinements; 2s. 6d. for vaccinations; and 1s. for each medical certificate other than for National Insurance and Works Funeral Society.

Speaking at a recent Friendly Societies' conference held at Stirling, the Clerk to the Glasgow Burgh Insurance Committee suggested that the Ministry of Health should arrange for the local administration of the public medical service, with central dispensaries replacing individual practitioners in populous districts. He thought that the total cost of a model scheme would be 12s. 1d. a head per annum, or a rate of 1s. 6d. in the £.

Edinburgh.

Search is being made near Edinburgh for mineral oil.

The Edinburgh Chemists' Golf Club played their "Bogey" competition on June 4 over Lothianburn course. A fairly high wind gave the players some trouble. The following were the prize-winners: (1st) James Finlay, (tie) A. J. Clark and R. L. Munnoch.

At the meeting of the Royal Society of Edinburgh on June 2, Professor A. Anstruther Lawson, professor of botany in the University of Sydney, was presented with the Makdougall-Brisbane Prize. Dr. Leonard Dobbin, Edinburgh University, made a communication to the meeting on "The Presence of Formic Acid in the Stinging Hairs of the Nettle."

At a meeting of the Highland and Agricultural Society on June 3 Dr. J. F. Tocher, Ph.C., consulting chemist to the Society, reported that a sample which was labelled "meat meal" was found, on analysis, to be really a sample of fish guano, wholly unsuitable for feeding purposes, but of value as a fertiliser, containing, as it did, 6 per cent. of nitrogen and 7 per cent. of phosphates.

Glasgow.

At Edinburgh last week Mr. A. B. Gilmour, chemist and druggist, Glasgow, was granted a divorce from his wife, with expenses against the co-defender.

The jubilee celebration of the Scottish Co-operative Wholesale Society, Ltd., postponed on account of the war, takes place in Glasgow on June 14. The capital of the Society in 1869 was 5,174l. and in 1918 5,773,569l.

Mr. Thomas McNab, chemist and druggist, who has relinquished his position as lecturer at the Glasgow School of Pharmacy and has opened a business at 127 Whifflet Street, Coatbridge, has been presented by the Principal of the School (Mr. M. M. Irvine, Ph.C.) and his students with a clock.

French News.

(From the "C. & D." Paris Correspondent.)

TRANSPORT UP TO DATE.—A Parisian forwarding firm announces the transport of goods by aeroplane, from Paris to Lille, at the rate of a shilling per pound (1fr.25 per 500 grammes).

AARON AARONSON, who lost his life when the British mail aeroplane from London to Paris fell into the Channel, was a Russian Jew by birth, but was educated in Paris as a chemist and botanist before he became a Zionist agricultural expert in Palestine.

AT THE ACADEMY OF SCIENCES, M. Armand Gautier recently read a paper on the assimilation by plants of fluorine and its influence on vegetation. M. d'Arsonval summarised M. Georges Claude's researches on the preparation of chloride of ammonium (for use as an artificial fertiliser) from synthetic ammonia.

A TAX ON SPAS.—The Finance Committee of the French Parliament has proposed a tax on curative and "climaterie" health resorts, spas, etc. A portion of the receipts will be devoted to the chairs of hydrology and climatology at the Faculties of Medicine, and another portion to advertising through the National Office of Tourism.

PHARMACIST'S WIFE MURDERED.—A Parisian daily paper reports that the wife of a pharmacist of Lodinières (Seine-Inferieure) has been shot by her husband's assistant. The murderer, who was a refugee from the invaded Northern districts of France (where he appears to have owned a pharmacy), subsequently endeavoured to commit suicide.

THE COST OF HOSPITALS.—The "Journal des Débats" doubts the likelihood of any of the Parisian hospitals being reconstructed on the site of the Paris fortifications. Many of the establishments it is proposed to transfer have been recently modernised at considerable expense, and to build a new hospital on modern lines and at present prices is stated to represent an outlay of 12,000fr. to 16,000fr. "per bed."

THE CRAFTY TEUTON.—Oscar Notzold, of German nationality, was employed until recently in a Montreuil chemical works. He had served in the German army till last November, when, after the Armistice, he coolly walked across the bridge from Kehl to Strasbourg and handed himself up to the French as Maurice Lefevre, a civilian Belgian fresh from captivity in Germany. Curiously enough, his impudent fraud was only established by his being falsely accused of stealing a bicycle. This led to inquiries; he was searched, and papers found on him established his record. As he had lived at Hirson before the war, he was not handicapped by the language difficulty.

NURSE CAVELL'S HELPERS.—Referring to Miss Cavell's funeral in England, the "Illustration" tells the story of her trial. One of her assistants was Léon Severin, a Brussels pharmacist, who helped to collect the fugitive soldiers and to procure for them false "papers of identity." The refugees were often guided to the Dutch frontier by a man named Gilles, who had once worked for Severin, and who, later on, also fell into the Germans' hands. When the German "military auditor," Stoeber, held this historic trial in the Senate House at Brussels he secured a sentence of death against Miss Cavell, Baucq (an architect), Severin the pharmacist, a Mademoiselle Thuilliez, and the Countess of Belleville. Only the first two, however, were actually executed.

POISONED SWEETS.—M. Léclair, in a French pharmaceutical journal, tells an amusing tale of the poisoned sweets which the Germans were accused of dropping in the streets of Allied towns during air-raids. In 1915, in a town frequently visited by aeroplanes, the gendarmes found, near a wrecked house, some chocolate-coloured objects wrapped in tinfoil. According to regulations, these objects were carefully handed over to the nearest Army laboratory, where the pharmacist in charge found they were belladonna suppositories. In 1917, in the same town, after another air-raid, two objects were brought to the pharmacist. One proved to be a well-known proprietary "for pale people" (picked up near a pharmacy); the other some milk chocolate, evidently thrown away by a British soldier. M. Léclair states that in the archives of Dunkirk there is a document signed by Cochet, an apothecary, and dated 4 Thermidor year viii. (July 23, 1800), affirming that "sweets," found in the street, were identified as coriander-seed coated with sugar, a piece of barley sugar, and a white bean (haricot) respectively. All were certified harmless. Cochet added in a letter: "The credulity of folks is so unlimited that very often *parturient montes, nascitur ridiculus mus*."

Colonial and Foreign News.

RAISING IMPORT DUTIES.—To assist the Dutch export industry to meet the keen competition for new world-markets a Bill has been introduced into the Dutch Chamber providing for the duty-free import into Holland of raw materials which are to be manufactured into export articles. The chemical industry was one of those specially desirous of such a Bill.

CULTIVATION OF HASHISH.—It is stated that the Greek Government, after repeated requests from the British Government, is to prohibit the cultivation of *Cannabis indica* (hashish), which is the chief product of the Mantinea district. The growers will probably be indemnified by the assignment of a sum equal to ten years' revenue from the taxation of the crop.

NO POTASH FOR AMERICA.—The Potash Syndicate, Berlin, which has already sent large quantities of potash to Hamburg to facilitate rapid delivery to America, has been advised by the American representative to dispose of the supplies elsewhere. The reason is probably that if the German potash were imported, the American product, obtained from seaweed, etc., at a cost of several times that of the German article, would become unsaleable.

METRIC SYSTEM IN BELGIUM.—The Liège Syndical Chamber for industrial products, etc., is complaining of the difficulties caused by the almost universal British habit of quoting for goods in other than metric measures. The honorary British Vice-Consul at Liège is repeatedly having his attention drawn to the same subject, and he points out that, if United Kingdom firms wish to develop their trade in Belgium, quotations under the metric system are essential.

RAW MATERIALS FOR PERFUMERY. said a speaker at the U.S.A. Manufacturing Perfumers' Association Convention, are likely to remain at their present high prices for some time to come. Difficulties in obtaining raw material will also confront the industry for an indefinite period. Producers in France and allied countries will be forced to sell at increased prices because of their enormous war debts. The competition of Germany need not be feared. The speaker showed that the average price of twenty-five essential materials, which in 1914 was \$17.50 per lb., is to-day \$23.50.

GERMANY'S VANISHED MONOPOLY.—The economic effects of the peace terms are discussed in a recent issue of the "Kölnische Zeitung." With regard to Alsace it states that the important matter is not the loss of the quantities of potash, but the fact that Germany will no longer have a world monopoly of this product. The potash trade must be built on an entirely new basis. Socialisation and syndicalism would be the ruin of the industry under circumstances where competition on foreign markets will make quick decisions essential, if the German industry is to hold its own. One thing is certain, however, and that is that profits on the former scale will be things of the past.

COCAINE IN CANADA.—An Order in Council (P.C. 1012) was passed on May 14 prohibiting the exportation of cocaine and its salts and preparations, opium and its preparations, opium alkaloids and their salts and preparations, to any destination outside Canada except under licence issued on the recommendation of the Minister of Trade and Commerce. At the same time an Order in Council (P.C. 1011) was passed, under which the importation into Canada of cocaine and its dry salts and preparations, opium and its preparations, opium alkaloids and their salts and preparations, is prohibited except under licence issued on the recommendation of the Minister of Trade and Commerce.

HUNGARIAN MEDICAMENTS.—The measures undertaken by the Commissariat for Labour and People's Welfare in Hungary ensures that the supply of medicaments will be continued. Medicine factories are already working, and 20,000,000 kr. have been liquidated through the Soviet Government for the purchase of medicines. Large quantities of some articles in which the shortage was acute and druggists' stocks of medicines are now being distributed to the pharmacists. The wholesale drug-stores have also been socialised. The four large works which were in the hands of banks have been socialised and amalgamated under the style of "Central Medicine Supply of the Soviet Republic." For the supply of Budapest a large medicine factory will shortly be established there, and one at Ujpest for the provinces. In conformity with an Order of the Commissariat for Labour and People's Welfare, only 50 per cent. of the workers at bandage factories and works engaged in the manufacture of surgical instruments may join up.

Legal Reports.

Bakelite Patents.—In the Patent Office Court, on June 4, the Damard Lacquer Co., Ltd., 82 Victoria Street, London, and Birmingham, applied for a licence to use the Bakeland patents for phenol and formaldehyde products (1921/08, 1922/08, 21,566/08, 26,614/11, 6293/12, 6294/12, 7284/15). The Damard Lacquer Co. had applied for licences for other patents, and in these cases, counsel said, as carbolic acid was employed as an ingredient, they proposed that they should pay a royalty of 2.4d. per gallon of carbolic acid employed. Mr. Temple Franks, the Comptroller of Patents, said that British Dyes, Ltd., had applied for a licence to use patents for phenol and formaldehyde condensation products, and they had offered 3d. per gallon royalty on the phenol. The Board of Trade had accepted that, and he thought there must accordingly be the same royalty basis in the two cases. This the applicants agreed to, and it was notified that the application would be granted.

Sale of Food and Drugs Acts.—At the Guildhall, London, on June 7, Mr. Edgar D. Foster, Ph.C., 56 Bishopsgate, was summoned for selling calomel ointment 48 per cent. deficient in calomel. Alderman Sir Wm. Dunn, remarking that Foster's, of Bishopsgate, was well known as a firm of repute, inflicted a fine of 40s. and 2l. 2s. costs, the result of the analysis not being in dispute, but the defence pleading that the purchaser did not ask for British Pharmacopoeia strength. The ointment sold was of the strength usually prescribed—on which its reputation had been built. The present strength was only a recent one. Mr. Vickery, Assistant City Solicitor, thought it hard that a person must incur the expense of going to a medical man for a prescription or incur the danger of getting an inferior article. Mr. Kirby, defending, said there was no intention whatever of obtaining additional profit. Mr. Foster had been in business over twenty-five years, and this ointment was sold, without reference to the B.P. strength, as appropriate for general use. Sir Wm. Dunn: The strength given in the British Pharmacopoeia should have been followed.

New Companies and Company News.

P.C. means Private Company and R.O. Registered Office.

E. LECITHIN, LTD. (P.C.).—Capital 25,000l. Objects: To enter into agreement with S. W. Copley, H. E. Carr, J. K. Colwell, and A. J. C. Lickorish, and to manufacture and deal in Lectona and all kinds of medicines and drugs. R.O., 1 Queen Victoria Street, London, E.C.

FINLAND AMERICAN COMMERCE CO., LTD. (P.C.).—Capital 2,500l. Objects: To carry on business as importers, exporters, buyers, and sellers of drugs, chemicals, dyestuffs, oils, colours, proprietary goods, and other goods of all kinds, etc. R.O., 19 St. Bride Street, London, E.C. 4.

E. MATHER & CO., LTD. (P.C.).—Capital 3,000l. Objects: To take over the business of a wholesale photographic and chemical manufacturer and dealer formerly carried on by B. Mather at 7 Victoria Bridge, Salford, also to carry on the business of manufacturers of and dealers in cinematograph and other lanterns, films, etc. R.O., 7 Victoria Bridge, Salford.

G. B. KENT & SONS, LTD. have declared the usual dividend at the rate of 5½ per cent. per annum upon the cumulative participating preference shares for the six months ended March 31, 1919.

BRUNNER, MOND & CO., LTD.—The ordinary general meeting will be held on June 20, 1919, at 1 p.m., at the Exchange Station Hotel, Tithebarn Street, Liverpool, for the purpose of considering the report of the directors, declaring a dividend (C. & D., June 7, p. 65), and conducting the ordinary business of the company. A resolution will also be submitted to increase the nominal capital from 10,000,000l. to 15,000,000l.

JOINT-STOCK COMPANIES.—Notice is given in the "London Gazette," May 30, that the names of the undermentioned companies have been struck off the Register and the companies dissolved: Association of Physicians and Surgeons of the Society of Apothecaries, Ltd.; Buvo Extract of Meat Co., Ltd.; Dr. Beesly's Preparations, Ltd.; Dr. Meyer's Processes, Ltd.; Gray's Remedies, Ltd.; Iodell Chemical Co., Ltd.; Maxim Food Syndicate, Ltd.; Soda Fountain Manufacturing Co., Ltd.

Trade-marks Applied for.

The figures in parentheses refer to the classes in which the marks are grouped, for a list of which, with particulars as to registration, see "The Chemist and Druggist Diary," 1917, p. 220.

(From "The Trade-marks Journal," May 23, 1919.)

- "GOLDEN FLEECE" with picture of sheep for sheep-dips, etc. (2). By D. Brown, jun., 45 Hope Street, Glasgow. 388,611.
- "VYNORA"; for all goods (2 and 47). By Vinolia Co., Ltd., 37 Upper Thames Street, E.C. 4. 389,209/210. (Associated.)
- "TANGLETINE"; for fruit-tree banding material (2). By The Yalding Manufacturing Co., Ltd., near Hampstead Lane, Yalding. 389,499.
- "S. F." SOAP SAFETY FIRST with picture of man crossing in front of train ("S. F." disclaimed); for soap (3 and 46). By P. E. Hurst, 2 Birdhurst Road, South Croydon. 389,278/9. (Associated.)
- "BRALLAX BRAND MEDICINAL PETROLEUM"; for medicinal petroleum (3). By J. L. Bragg, Ltd., 14 Wigmore Street, London, W. 1. 389,539.
- "LISTETS"; for medicinal chemicals (5). By A. J. Barnes, 1 Charlemont Street, Dublin. 389,622.
- "GEISHA"; for medicinal chemicals (3). By Krebs Frères, Biel, Switzerland. 389,672. (Associated.)
- "BRONKETTE BRAND MEDICATED LOZENGES"; for medicated lozenges (5). By Timothy White Co., Ltd., 30 Chandos Street, Portsmouth. 389,708.
- "BAKORA"; for medicinal chemicals (5). By T. H. Walton, 2 Upper Road, Batley. 389,901.
- "S X" monogram in circle; for medicinal herbal tablets (3). By F. Essex Lewis, 30a Old Market Street, Bristol. 390,009. (Associated.)
- "PHAROS" under picture of tower; for beverages (42), and for mineral waters, etc. (44). By A. Leney & Co., Ltd., Castle Street, Dover. 389,538. (Associated.)
- "MARCOPS"; for food substances (42). By Excel Co., Ltd., 7 Russell Gardens, Kensington, W. 14. 390,194.
- Device of classical figure blindfolded, riding on winged wheel, and dropping gifts from horn; for toilet preparations (48). By La Valliere, 17 Church Road, Barnes, S.W. 13. 388,712.
- "RUVOIRE"; for all goods (48). By A. M. Evans, 154 Church Lane, Harpurhey, Manchester. 389,657.
- "ROVER INVISIBLE NILDE" on circular label device; for perfumery, etc. (48). By C. Davis, 51 Rue du Rocher, Paris. 389,434. (Associated.)
- "CHINTA HATI" oval device of three girls' heads surrounded by words "THE HALL-MARK OF QUALITY YARDLEY"; for perfumery, etc. (48). By Yardley & Co., Ltd., 105 Carpenter's Road, Stratford, E. 15. 389,758/9. (Associated.)
- "PARFUM DES FEES"; for perfumery, etc. (48). By J. & E. Atkinson, Ltd., 24 Old Bond Street, London, W. 1. 389,760.
- "AID TO AID" forming device and including words "Safety First"; for perfumery, etc. (48). By Fassett & Johnson, Ltd., 86 Clerkenwell Road, E.C. 1. 389,789.
- "MAGIST"; for perfumery, etc. (48). By E. J. Green, 62 Linnaeus Street, Hull. 390,309.

(From "The Trade-marks Journal," June 4, 1919.)

- "ARISTON"; for chemicals (1). By Griffiths Bros. & Co., London, Ltd., 29 Macks Road, Bermondsey, S.E. 16. 389,293.
- "DEL-A-TONE"; for depilatories (1). By Sheffield Pharmaceutical Co., 339 South Wabash Avenue, Chicago, U.S.A. 390,007.
- "ATLAS 3 FREE FROM FUR" in device form ("3" and "F" disclaimed); for a chemical for removing fur from radiators (1). By Atlas Preservative Co., Ltd., Windmill Lane Wharf, Deptford, S.E. 8. 390,230. (Associated.)
- "TELENDURON"; for chemicals (1) and for scientific instruments, etc. (8). By T. De La Rue & Co., Ltd., 110 Bunhill Row, E.C. 1. 390,234/5. (Associated.)
- "OVO LECTON BRAND MEDICATED FOOD" and "LECTONA BRAND MEDICATED FOOD"; for medicated foods (3). By J. K. Colwell, A. Lickorish and H. E. Carr, Chemical Laboratory, Town Hall, Rosebery Avenue, London, E.C. 1. 384,745; 389,857. (Associated.)
- "KILLY"; for beverages (3), (42), and (44). By Mair & Dougall, Ltd., 35-41 Annfield Street, Glasgow. 386,952/953; 387,048. (Associated.)
- "CARMINZYM BRAND DIGESTIVE PREPARATION"; for medicinal chemicals (3). By Fairchild Bros. & Foster, 65 Holborn Viaduct, London, E.C. 1. 387,227.
- "HALMO"; for cattle medicines and disinfectants (2), medicinal chemicals (3), and for polishes (50). By H. Moore and Alexanders, Ltd., The Linen Hall, Yarnhall Street, Dublin. 387,297/298/299. (Associated.)
- "MYSTERY BRAND A MEDICINE"; for a medicine (3). By C. R. Longcroft, 2 Broad Street Place, London, E.C. 2. 387,649.
- "BOVIN BRAND TONIC WINE"; for medicinal chemicals (3). By S. Cook, 76 Radford Road, Nottingham. 389,087.
- "SURGINOL"; for medicinal chemicals (3). By L. H. Harper, The Pharmacy, Innerleven, Fife. 389,792.
- "ZELK BRAND AN OINTMENT"; for an ointment (3). By J. E. T. Company, 6 Dixon Street, Glasgow. 389,866.
- "FRUTICON" and "BIERUTA"; for all goods (3). By Acte & Co., Ltd., 4 & 5 Stonecutter Street, London, E.C. 4. 389,925/927.
- "NIBROM"; for scientific instruments, etc. (8). By Nicholson Bros., Ltd., Roberts Street, Grimsby. 388,410. (Associated.)
- "BRITOPCO"; for spectacle frames (14). By The British Optical Manufacturing Co., 3a South Hill Park, Hampstead Heath, N.W. 3. 387,660.
- "UWANTIT PORENOT" ("Uwantit" disclaimed); for food substances (42). By T. Jones & Co., Ltd., Old Post Office Place, Liverpool. 387,524.

Pharmacy in the Italian Army.

ONE of my most interesting experiences, during five years of war, was the time spent with the Italian Army. I arrived with the British and French troops, sent to the assistance of our Italian comrades, in the black days of November, 1917. The Italians, after a series of magnificent victories and after almost superhuman military engineering feats in the construction of roads and tunnels over inaccessible mountains, had suddenly collapsed, and were in full retreat before the Austro-German forces. The arrival of the British and French troops stemmed the tide of the Austrian advance and the Italian Army made the finest recovery in history. The Austrians were held on the Piave, and, on the mountain passes, their renewed attack in the following June was repulsed with the heaviest loss, and they were hurled back into their own territory in October, 1918.

As in the case of the French *Service de Santé*, in order properly to appreciate the position held by pharmacy in the army of our Italian Allies, it is necessary briefly to sketch the organisation of the Italian Medical Service. Italy as a unified kingdom is of so recent a date that its Medical Service might be thought to have no history; but this is hardly the case, for so far back as 1833 we find an organised service in what was then the kingdom of Sardinia, with one pharmacist to about every ten medical officers. It is noteworthy, also, that the organisation of the Army Medical Service, in the form of autonomous medical units, was adopted earlier in Italy than in any other continental country.

The Army Medical Inspectorate at the Italian War Office consists of an Inspector-in-Chief, assisted by five inspectors, of whom one is a pharmacist officer designated "Inspector of Pharmacy and Chemical Services."

GRADES OF THE ITALIAN MEDICAL SERVICE.

The medical officers of the Italian Army and Italian Red Cross—to which I will refer subsequently—have ordinary military titles followed by the word "Medico." Pharmacist officers do not, however, hold ordinary military titles. They are graded as follows:

Chemico farmacista ispettore, ranking as Colonel.

Chemico farmacista direttore, ranking as Lieutenant-Colonel.

Farmacista Capo di 1a Classe, ranking as Major.

Farmacista Capo di 2a Classe, ranking as Captain.

Farmacista di 1a Classe, ranking as Captain also, but drawing less pay than the *Farmacista Capo di 2a Classe*.

Farmacista di 2a Classe, ranking as Lieutenant.

Farmacista di complemento di 3a Classe, ranking as Second-Lieutenant.

As in the case of the Australian Commonwealth Forces, there are no distinctions in the emblems of different branches of the Italian Army. All officers, whether combatant, medical or pharmaceutical, draw the pay of the rank to which they belong. Medical officers draw a small additional special allowance, but the privilege is not shared by their pharmaceutical colleagues. Pharmacist and medical officers wear the same field grey uniform as other officers, the colour of which is now fairly familiar in the streets of London. The different regiments, administrative and other services, are distinguished by different coloured gorget patches. Medical officers wear dull cherry-coloured, and pharmacists black, patches, on their collars. All grades of the Italian Army, from private to general officer, wear the five-pointed star of United Italy on the collar-patch. Medical officers and pharmacist officers of the Italian Red Cross have the same badge as military ranks, but with a small red cross in the centre of the star. The cap-badge of all grades of the medical service is a five-pointed star enclosing a minute red cross and surmounted by the royal crown.

THE MEDICAL SERVICE IN THE FIELD.

The medical service with an army in the field is divisible into three groups: (1) Divisional; (2) Corps; (3) Army.

(1) *Divisional*.—As in the French Army each regiment, which, it will be remembered, corresponds with a British Brigade—has its own regimental medical staff, but in the Italian Army there is no pharmacist officer in charge of the regiment, as with the French. Each division has one *Sezione di Sanità*, which is responsible for the evacuation of wounded from the regimental aid posts back to the field hospital. There is no pharmacist with this formation, which corresponds with the *Groupe des Brancardiers Divisionnaire*, or Divisional Bearer Company of the French rather than with our field ambulances.

(2) *Corps*.—The Italian Army is organised on a corps basis, and therefore the *Direttore di Sanità*, who corresponds with the Deputy Director of Medical Services in our Army, has much more power and authority than has his British colleague. The Italian officer corresponding with our Divisional A.D.M.S. is only a major, and has comparatively little administrative work or responsibility. In our Army the Divisional A.D.M.S. and Corps D.D.M.S. are both full colonels, and, whereas the former has three units under his immediate command, the latter has no medical formations under his direct control.

Each Italian corps has attached to it from twenty to thirty *Ospedali di Campo*, with an aggregate of two thousand beds. *Ospedali di Campo* are field hospitals, and provide accommodation for fifty, 100, or 200 patients.

It is with the hundred-bedded hospital that we first find the pharmacist officer. The personnel of these units is: Three medical officers, one pharmacist, two quartermasters, thirty-eight rank and file.

The Director of Medical Services of the Italian Corps takes over all wounded and sick at the *Posto Smistamento*, or divisional dressing-stations of his divisions, and distributes the cases to these field hospitals. The *Ospedali di Campo* therefore act as casualty clearing stations for the divisions. They are mobile, but may be immobilised for special work, such as infectious hospitals. On the plains they are located in palaces, villas, schools, or theatres, but in the mountains special wooden huts are erected for them by the engineers. All are furnished with collapsible iron beds, sheets, and blankets. In all these hospitals special attention is given to the *Farmacia*, which I found invariably well stocked and equipped.

DISINFECTION AND WATER-SUPERVISION UNIT.

With each corps is a special unit, corresponding, more or less, with our sanitary sections, but equivalent in strength to four of our sanitary formations. There is a medical officer in charge, a pharmacist officer, two engineer officers, and one hundred other ranks.

The pharmacist officer is the consulting chemist and analyst of the section, and, by virtue of his position, the adviser on all chemical matters to the Director of Medical Services of the Army Corps. In an Italian Army Corps he, therefore, holds a responsible and honourable position which has no analogue in the British Service.

(3) *Army*.—An Italian Army consists of a group of three or more army corps. The medical services of each Army is under the direction of a *Direttore di Sanità d'Armata*, who is a *Maggiore Generale Medico*, or surgeon-general. He has on his staff eight medical and four pharmacist officers. The Chief Pharmacist of the Army is responsible to the Director for the care of all drugs, dressings, medical and surgical appliances in the Army area. He carries out, on behalf of his chief, inspections of military pharmacies, chemical and scientific laboratories and advanced depôts of medical stores.

CARE OF MEDICAL AND SURGICAL STORES.

As in the French and other Continental armies, the care of medical and surgical stores is entirely in the hands of pharmacists. In our Army the care of advanced and base depôts of medical stores has been in the hands of Royal Army Medical Corps quartermasters throughout the greater part of the European War. In the South African, and all previous wars, these depôts have been commanded and administered by medical officers.

The chief source of drugs, dressings, and medical and surgical appliances for the Italian Army is the *Farmacia Centrale Militare* at Turin, which is under the command

of the *Chemico Farmacista Direttore*, who has a large staff of pharmacist officers and subordinates.

The Central Military Pharmacy is organised in six sections, each under the command of a pharmacist officer. These sections are as follows:

- (1) Analytical laboratory.
- (2) Pharmaceutical laboratory.
- (3) Quinine factory.
- (4) Bacteriological laboratory.
- (5) Surgical dressing mill.
- (6) Packing, receiving, and distributing stores.

The "Pharmacy" is, in short, a wholesale drug-store of the largest and most up-to-date kind. The machinery for making tablets is of the most modern description, and the preparation of hypodermic solutions is a special feature of the establishment. All hypodermic solutions are packed in small phials containing one dose.

The quinine factory was, before the war, the most important part of the pharmacy. It supplied not only the army, but many civil institutions in Italy and elsewhere. Malaria is common in parts of the kingdom, and, as in India, the State, aided by the *Croce Rossa Italiana*, makes special arrangements for the sale and gratuitous distribution of quinine to the public.

The Central Pharmacy was able to turn out 300,000 five-grain tablets of quinine daily, and, in addition to supplying its own needs before the war, the Italian Government was able to export quinine to Turkey, Greece, the Balkan States, and many other countries. The Central Pharmacy distributes supplies to regional and army pharmacies, on which all military hospitals and formations in the region or army indent for their requirements.

RECRUITMENT OF PHARMACIST OFFICERS.

The Italian Army Medical School is at Florence. It is an institution exactly similar to our Royal Army Medical College. Like our College, it differs from the French and other Continental military medical schools in the fact that it is attended only by graduates in medicine of the universities who are candidates for commissions in the regular army or for the rank of surgeon-lieutenant in the reserve. Pharmacists do not pass through this school. Students of pharmacy enter companies of the Army Medical Service, and on passing an examination become pharmacist cadets with the rank of corporal or sergeant. On graduation in their universities they go through a special course of instruction, and may then present themselves for examination for advancement to the rank of *Farmacista di Complemento di 3a Classe* (pharmacist officer of the reserve), with the rank of second-lieutenant. On attaining this rank the pharmacist officer may serve the remainder of his period of liability to military service in the reserve, or may enter for a competitive examination for a commission in the standing army. If successful he is gazetted a *Farmacista di 2a Classe*, with the rank and pay of lieutenant.

From this grade he is promoted by seniority or selection. In peace there are, as in the case of the British service, medical officers' examination for each step in rank, but these are, of course, abolished in war time.

In addition to the pharmacist officers and cadets there is a considerable *personnel* employed on pharmaceutical duties. These are the medical assistants or *aiutanti di sanità*, who are recruits from among the students of medicine, science, and pharmacy of the universities. Young priests are also liable for service as medical assistants. These medical assistants have the rank of corporal and lance-corporal, forming a section in each company of the Army Medical Service apart from the nursing, clerical, and stretcher-bearer sections.

In addition to the pharmacists of the Regular Army the Italian Red Cross, or *Croce Rossa Italiana*, employs a very large number of graduates in pharmacy of the universities.

The Red Cross enjoys a very honoured and important position in Italy, and its *personnel* is to some extent exempted from ordinary military service.

It has long anticipated the present scheme for utilising the Red Cross in peace time, and had, for instance, a well-organised anti-malarial service long before the war.

Quinine was distributed at the expense of the Government and of the Society by trained pharmacists.

It will be seen by readers of the article on Pharmacy in the French Army (*C. & D.*, June 7, p. 50) that the profession of pharmacy holds a high and honoured place in the French Army, but that, although Italy is almost so democratic a country as France, the pharmacist official is on a somewhat lower plane than with the army of the Great Republic, where the *pharmacien* and *médecin* are, in every sense of the term, "Brothers in Arms."

M.D., L.P.S.I. (26/50.)

British Exports of Soap.

An official report upon the "Export Trade Policy of the United Kingdom, 1913-1918," has been prepared by the Bureau of Research of the United States War Trade Board, and is summarised in the "Grocer." The purpose of the report is to show the character and extent of the export trade of the United Kingdom since the beginning of the war. The investigation of the soap business was prompted by varying opinions that prevailed in the United States in regard to the effect which the war was having on this trade. The report, which investigates the relative quantities of goods in the several years, and reduces war values to the prices of 1913 in order to compare volumes of trade, brings out clearly the extent to which the United Kingdom has sacrificed its export trade during the war. It contains the following:

In practically all cases where the United Kingdom shows increased exports it is due to shipments to her Allies. This is true of her large exports of steel bars and rods, though the quantities of these have shown a great decline in 1918. The only significant exception to this rule is in the case of soap, and soap is a relatively unimportant export. The domestic exports of this commodity form one of the few exceptions to the decline which United Kingdom exports in general have shown since the war began. The total domestic exports of this class of soap (toilet soap) in 1913 were 86,000 cwt., and had increased to 99,000 cwt. in 1917, and the total for the first six months of 1918 was 41,000 cwt. The most marked increases to 1916 were to France, Argentine Republic, British India, and China. Data for separate countries are not given after that time. United States data for this class of soap are not given in terms of quantity. The value of the total export in 1913 was about the same as for the same class of soap for the United Kingdom; in other words, a little over two million dollars. The value for 1915 was somewhat less than this, and for 1916 considerably greater; but for the other years, to and including 1918, there has been no great change. On the whole, there has been a decrease in the exports of this class of soap to the European Allies, but a marked increase in the value of exports to Canada, Mexico, Central America, Cuba, and the West Indies from 1913 to 1918. In the same period the exports to Australia and New Zealand have decreased very much, while those to the Philippines have increased. The United Kingdom domestic export of household and laundry soap is somewhat less in value than that of toilet soap, but, as in the case of toilet soap, the total quantity exported has increased since the war began. The data on this export are not very detailed, but they show that to 1916 the quantity sent to the Netherlands increased threefold. There is also some increase in the quantity sent to the Argentine Republic and Chile and very slight increases to British India and China. United Kingdom re-exports of household and laundry soap and also of toilet soap have never been important, and they had practically ceased by 1918. In value the export of soap (other than toilet or fancy) in 1913 was about 50 per cent. greater than the corresponding export from the United Kingdom. In terms of quantity it increased from 51 million lb. in 1913 to 83 million lb. in 1918; in other words, the United States export increased by 60 per cent., whereas that of the United Kingdom increased by about 16 per cent. in the same time. During the last two years nearly all of the United States export of this class of soap has gone to non-Allied countries, though a large quantity was sent to France in 1918. Prior to 1917 the U.S. sent very large amounts to the United Kingdom, but since that time only small amounts. By far the largest increases by the U.S. have been to Mexico, Central America, Cuba, and the other West Indies, but there also has been an extremely large increase to China.

IMPORTATION OF SHEEP-DIP INTO AUSTRALIA PROHIBITED.—A proclamation has been issued prohibiting the importation into the Commonwealth of Australia of sheep-dip, unless with the consent of the Minister for Trade and Customs.

Corner for Students.

Conducted by Leonard Dobbin, Ph.D.

Communications should be addressed "Corner for Students, 'The Chemist and Druggist,' 42 Cannon Street, London, E.C. 4."

Report of the May Analytical Exercise.

THE powder distributed to students on May 13 contained three parts by weight of di-sodium hydrogen phosphate, one part of sodium thiosulphate, and one part of sodium chloride. The calculated composition of such a mixture is:—

Na	...	...	...	19.3
PO ₄	...	...	...	15.9
S ₂ O ₃	...	...	...	9.0
Cl	...	...	...	12.1
H	...	...	...	0.2
H ₂ O	...	...	...	43.5

100.0

The powder also contained, as impurity, lithium in very small proportion.

Samples of the powder were distributed to thirty-six students and nineteen reports on its analysis were submitted. In every case sodium was detected. The failures in the detection of the acidic radicals were: Phosphoric, 3; thiosulphuric, 2; hydrochloric, 12. Two students failed to report the abundant evolution of water which occurred when the powder was heated in a dry test-tube. The lithium present as impurity was detected in a single instance only.

This mixture was designed as an exercise in the recognition of acid radicals—a branch of analysis in which beginners in particular are liable to be rather weak. Since it dissolved entirely in water, did not yield any sulphide precipitate with hydrogen sulphide in acid solution, and was found to contain the phosphoric acid radical, it was evident at a pretty early stage that only alkali metals could be present, and under these circumstances the special preparation, by boiling the powder with water and sodium carbonate, of a solution to be tested for acid radicals was not requisite. Nevertheless, several students performed this needless operation, with the attendant risk of introducing impurities, such as traces of sulphates, contained in the sodium carbonate used. The end to be attained by boiling with sodium carbonate solution and filtering—viz., the removal as insoluble carbonates or hydroxides of metallic radicals other than alkali metals is thus not always duly appreciated, but a too rigid adherence to text-book instructions is observed instead, whether or not these instructions apply to the case in hand. A parallel illustration of the needless observance of routine instructions was furnished by the several students who carried out operations for the removal of the phosphoric acid radical, although in this analysis the conditions which render such removal necessary—i.e., the presence of iron-, zinc- or barium-group metals, or of magnesium—were non-existent.

The thiosulphate in the mixture was the cause of considerable uncertainty and error. Thus its behaviour in the preliminary testing when the powder was heated either alone or with concentrated sulphuric acid, presented somewhat unfamiliar phenomena, or obscured a good deal of what would otherwise have been easily observed; and the way in which it behaved towards silver nitrate in the systematic testing for acid radicals was in itself puzzling to some students, while it rendered the recognition of the presence of the chloride more than usually troublesome. Students who have not already done so would be well advised to make a special study of the effects of progressively adding silver nitrate to a moderately dilute solution of sodium thiosulphate, noting what takes place as long as any further visible change is produced. They should also note the readiness with which silver chloride, bromide, iodide, and cyanide—that is, all the silver salts (with the exception of silver sulphide) which are insoluble in dilute nitric acid—dissolve in solution of sodium thiosulphate.

In order to test for a chloride, it was necessary either to destroy the thiosulphate by boiling with nitric acid prior to employing silver nitrate as a reagent, or to make an ammoniacal extract from the dark-coloured precipitate (consisting in part of silver sulphide) which was eventually formed when silver nitrate was added in excess to a portion of the original aqueous solution, and then to acidify this extract with dilute nitric acid. Some of the students who detected the chloride employed one of these methods, and some the other. The majority of the large proportion of students who failed to detect it omitted to apply any test that could have revealed its presence.

The proportion of lithium present as impurity was exceedingly small, and its detection in the presence of so much sodium without the aid of the spectroscope was scarcely expected.

PRIZES.

The first prize for the best analysis has been awarded to GLADYS BRAYSHAW, 7 Brook Street, Gloucester.

The second prize has been awarded to ELIZABETH SIM, Cemetery Lodge, Kelso.

First Prize.—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher naming the book or books they select.

MARKS AWARDED FOR ANALYSES.

1. Competitors who are unqualified:

G. Brayshaw (1st prize)	96	Pimento	...	...	71
E. Sim (2nd prize)	95	Nitrosyl	...	...	68
Hirudo	93	Lychtie	...	...	67
Amethyst	92	Luggie	...	...	66
Scopolamine	92	Georgie	...	...	64
N. A.	76	Alpha	...	...	56
C. B. M. C.	75	T. E. P.	...	...	51
Joshua	72	S. H. B.	...	...	41
F. L. Taylor	71	J. H. B.	...	...	35

2. Competitor who is qualified:

Far Out 70.

TO CORRESPONDENTS.

G. BRAYSHAW.—You have the distinction of being the only correspondent who detected the presence of lithium. Since ammonium magnesium phosphate is not altogether insoluble in water the precipitate you obtained with calcium sulphate after removing the precipitate of that substance no doubt consisted of calcium phosphate. Physical evidence points to the formula KMnO_4 instead of $\text{K}_2\text{Mn}_2\text{O}_8$.

E. SIM.—The precipitate you took to be barium sulphate may have been due to traces of sulphate formed by the action of nitric acid on the thiosulphate, but it may have consisted mainly, or entirely, of sulphur. It is a difficult problem to prove the presence of traces of a sulphate when much thiosulphate is present, since barium sulphate is quite sensibly soluble in thiosulphate solutions.

AMETHYST.—Thanks for your appreciatory remarks. We shall be well pleased to receive and to adjudicate upon any reports you may send in. Read the reply immediately preceding.

SCOPOLAMINE.—Without previously destroying the thiosulphate we were unable to get convincing evidence of the presence of a chloride by means of silver nitrate as you applied it, and we have serious doubts regarding the tests which satisfied you as to its presence.

N. A.—Some further test for halogen acids than merely heating the powder with manganese and sulphuric acid dioxide should have been applied. At best this is not a specially delicate test, and in the presence of a thiosulphate its indications were unlikely to be of much value.

C. B. M. C.—You do not appear to have applied any test for halogen acids, whereas these should have been

specially sought for in view of the property of thio-sulphates in effectively masking their behaviour with silver nitrate.

JOSHUA.—The discharge of the colour of permanganate by a solution of the powder in presence of sulphuric acid was due to the thiosulphate. Oxalate was not present. Your formulæ for potassium permanganate and magnesium sulphate require revision.

F. L. TAYLOR, NITROSYL, AND OTHERS.—You have not grasped the purport of removing the phosphoric acid radical from a solution by means of ferric chloride. This operation was quite unnecessary in the present analysis since the powder did not contain any metals which form phosphates insoluble in water.

PIMENTO.—If the solution of the powder, when mixed with nitric acid and ammonium molybdate and, subsequently heated nearly to the boiling point, failed to yield a yellow precipitate, the molybdate solution most likely requires attention. Examine its behaviour with a dilute solution of a phosphate.

LYCHTIE.—Boiling the powder with sodium carbonate in order to prepare a solution to be tested for acid radicals was unnecessary in the present instance. Make an experimental study of the behaviour of a moderately concentrated solution of sodium thiosulphate with a solution of silver nitrate when the latter is added in successive small quantities as long as any further change occurs.

LUGGIE AND FAR OUT.—The precipitate which you mistook for calcium tartrate was simply calcium phosphate.

GEORGIE.—We cannot definitely account for the reactions you report which led you to conclude that iron, in the ferrous state, was present, but we suspect imperfectly cleansed test-tubes—a frequent source of error.

ALPHA.—The form of your report is quite suitable, but many of the observations which it contains are far from accurate. Read the replies to other correspondents, as there are references in several of these to points upon which your report is incorrect.

T. E. P.—If there is any chance of iron having been introduced into the solution under analysis from the hydrogen sulphide generating apparatus effective steps should at once be taken to remedy this.

J. H. B.—See the second sentence of the reply to "Alpha."

Chemical Society.

At the meeting of the Chemical Society, held at Burlington House, London, W. 1, on June 5, Sir James Dobbie in the chair, Mr. P. Blackman read a paper on *An isotonic (isohmotic) apparatus for comparing molecular weights*. The apparatus consists of a tubular, porous, unglazed cell, treated with copper sulphate and ferrocyanide solution, and then with paraffin. This cell is filled with the solution (cane sugar), and placed in a large test-tube, also filled with solution. After a time the volumes of both solutions—i.e. inside and outside the cell—are measured. The author has by this means obtained some very accurate results. Mr. V. Cofman's paper dealt with *The active substance in the iodination of phenols*—i.e. an investigation of the substance which actually causes the entrance of iodine into the phenol molecule. He briefly described ten methods in use for the iodination of phenol, and pointed out how hypiodous acid is formed in the course of all these reactions; this decomposes into iodide plus iodate, hence the hypiodous acid acts as the actual carrier of iodine, and effects its entrance into the phenol molecule. Professor J. F. Thorpe, on *The Chemistry of the Glutaconic acids; the occurrence of 1.3 addition to the normal form*, is the last of this series, and he described the three forms of glutaconic acid: normal, cis-labile, and trans-labile, and the action of bromine, the introduction of a methyl group, condensation, and ester formation with regard to these forms. In another paper, by himself and Mr. G. A. R. Kon, Professor Thorpe dealt with the chemistry of the cyanoacetamide and guareschi condensations, in a new method for the preparation of glutaric acid. The next meeting will take place on June 19.

Organising the Drug-trade.

London Association of Chemists' Assistants.

A MEETING of London assistants was held at St. Bride's Institute, London, E.C., on June 5, when it was decided to form a London Association of Chemists' Assistants. Office-bearers and Committee were elected, Mr. J. A. W. Hepburn being appointed Hon. Secretary. It was agreed to affiliate with the National Association of Chemists' Assistants.

Meeting at Manchester.

A WELL-ATTENDED meeting was held, under the auspices of the Manchester Branch of the National Association of Chemists' Assistants, in the Chess Club Rooms, Market Street, on June 4. Mr. F. Brettelle presided, and Mr. D. N. Fullerton spoke on the aims of the Association and the success it was achieving. Mr. R. G. S. Dalkin was appointed delegate to the Whit-week Conference. A large number of new members was enrolled.

Hull Assistants' Meet.

THE FIRST MEETING of chemists' assistants to be held in Hull took place on June 4, about sixty being present. Mr. L. Sherwood Sellè (the Chairman) explained the points of difference between a Trade Board and an Industrial Council. After a discussion it was unanimously resolved to form an association in affiliation with the National Association of Chemists' Assistants. The Chairman was elected *President*; Miss E. Naylor *Treasurer*; and Mr. W. Mitchell *Secretary*. The Committee was formed of representatives of the "wholesale," the dispensers, the qualified managers, and the unqualified assistants in the "retail." Most of those present promised to join.

Men of Kent Meet.

A MEETING for chemists and their assistants residing in Dover, Deal, Walmer, and Sandwich was held, under the auspices of the Dover Chemists' Association, at the Town Hall, Dover, on June 4, with Mr. R. M. Ewell in the chair. The Secretary of the Kent (County) Association of Pharmacists (Mr. J. E. French) addressed the meeting on *Pharmaceutical Organisation*. The Industrial Council, Ministry of Health, Insurance work, and other subjects were reviewed, and the work of the Local Associations Executive, in connection with them, outlined. Among the questions dealt with was the proposed Maximum Hours Bill and its effect on chemists. Mr. French was thanked for his attendance and invited to visit the Dover Association again in the near future.

South African News.

(From "C. & D." Correspondents.)

"The Chemist and Druggist" is supplied weekly to members of all the Chemists' Societies in South Africa.

HEYNES MATHEW, LTD.—The building occupied by Heynes Mathew, Ltd., in Adderley Street, Cape Town, and which belonged to the estate of the late Mr. J. A. Mathew, has been recently sold to the "African Homes Trust." The retail and photographic departments will still be conducted at the "old corner" as heretofore, but the "wholesale" will be moved to the large and commodious premises known as Wieners' Buildings. The manufacturing department will occupy a separate and modern building of a size to meet the extension of this side of the company's activities.

PHARMACEUTICAL SOCIETY OF CAPE PROVINCE.—A general meeting was held at the Society's rooms, Darling Street, Capetown, on April 17. There were present Messrs. S. W. Hill (President), F. J. Harpur, H. Roytowski, G. Smith-Houghton, W. Asher, R. R. Osmond, J. Sloan, E. G. Alexander, A. Ross, G. S. Burton, R. S. Cheetham, W. Froembling, D. L. Petrie, T. J. Hughes, J. R. Corrigan, H. P. Marshall, and J. Sloan (Hon. Secretary). Before commencing the business of the meeting the President extended a hearty welcome to Mr. Osmond as a new member. The minutes of the general meeting, held on December 19, 1918, were read and confirmed. The new draft rules were then submitted to the meeting. Various amendments were suggested and some additions, and these were referred back to the Council. The rules as finally drafted will be submitted to the general meeting in June for adoption. With reference to unqualified dispensers in Government service, Mr. Harpur gave particulars of his appearance before the Public Service Commission in Pretoria, and expressed the opinion that at last there was a hope of something being done in the matter.

Personalities.

MR. JOSEPH HEWITT, chemist and druggist (Russell & Co., chemists, Windsor), was elected a Councillor for Castle-Ward on June 5.

MR. D. DRUMMOND, chemist and druggist, Great Yarmouth, has been elected a member of the local Naval and Military War Pensions Committee.

A CERTIFICATE OF NATURALISATION has been granted to S. Levin (known as Sam Lewin), Russian, 106 Burlington Road, New Malden, chemist's assistant.

MR. J. J. BOOTH (Booth & Co., wholesale druggists, Idle), who is chairman of the Bradford Musical Union, is promoting concerts in aid of institutions for the blind.

ALDERMAN OWEN A. CLARK, M.B.E., chemist and druggist, Bury St. Edmunds, has resumed his duties as Mayor of the borough after his recent illness. Alderman Clark has been Mayor throughout the whole period of the war, and during that time established several war organisations.

MR. A. NORMAN HARRIS, chemist and druggist, formerly with G. E. Bridge & Co., Ltd., chemists, Bournemouth, and for the past four years manager to Lennon, Ltd., at the Gatooma (Rhodesia) branch, has been appointed to the control of the company's manufacturing laboratories at Port Elizabeth, C.C.

DR. H. D. DAKIN, F.R.S., F.I.C., director of the Herter Laboratories of New York, has been granted authority to wear the Cross of Chevalier of the Legion of Honour which was conferred upon him by the President of the French Republic in recognition of valuable services rendered in the Allied cause.

CAPTAIN A. J. ESLEY, chemist and druggist, Blackburn Road, Accrington, has been awarded the Order of the British Empire for services in the Field-glass Department of the Army. Captain Esley was a combatant officer attached to the East Lancashire Regiment, and in 1916 underwent a severe operation (*C. & D.*, 1916, p. 1099). Recently he was chemistry teacher to Army men at Bonn University.

MR. JOHN ANDERSON, C.B., Secretary of the Ministry of Shipping, was promoted K.C.B. in the recent list of birthday honours. Sir John is also Secretary of the National Health Insurance Commission, and in that capacity is known to chemists that have to do with the negotiations on the Drug Tariff. Mr. N. F. W. Fisher, chairman of the Board of Inland Revenue, also received the K.C.B. Mr. Douglas Shields, the London surgeon, has received a knighthood for war services.

MR. G. E. MARFITT, chemist and druggist, Infirmary Square, Leicester, the winner of a first prize in a London window-dressing competition (*C. & D.*, May 10, p. 48), secured another first prize at the distribution of the awards at Kensington Town Hall on June 5. The ceremony formed part of the programme of a fancy-dress ball at which Mr. Marfitt appeared as "The Display Man" in a costume of his own design, and this costume was adjudged as the most original of those worn by the men present.

COLONEL ROBERT JAMES BLACKHAM, C.M.G., C.I.E., D.S.O., late R.A.M.C., has been awarded the C.B. in connection with his war services. His name occurs in the list of birthday honours in the "London Gazette," June 3. Col. Blackham is a pharmaceutical chemist (Ireland), having obtained his licence in 1890 after he had begun his medical studies at Edinburgh. Besides the Edinburgh and Glasgow diplomas, Col. Blackham holds the D.P.H. diploma of the Royal College of Physicians, England.

MR. F. W. CROSSLEY-HOLLAND, F.C.S., barrister-at-law and pharmacist, upon practising at the Bar, is relinquishing his position with Menley & James, Ltd., manufacturing chemists, Menley House, Farringdon Road, London, E.C. 1. His services in an advisory and consulting capacity will still be available for Menley & James, Ltd. He does not intend to abandon his interest in pharmaceutical matters in their political and social aspects, but will continue to identify himself actively with them.

Mr. Crossley-Holland has already been briefed in the High Court, and will practise there and upon the Midland Circuit.

SIR HARRY BRITTAI, M.P., who (as recorded in recent issues of *THE CHEMIST AND DRUGGIST*) has been putting questions in the House of Commons concerning Section 4 (b) of the Poisons and Pharmacy Act, 1908, has just resigned the presidency of the Pilgrims' Club, founded by him in 1902 in conjunction with the late Lord Roberts and a few other kindred spirits. Sir Harry Brittain has led a very active life since he was called to the Bar in 1897. In the following year he obtained the degree of M.A. at Oxford, and subsequently, in the diverse fields of journalism, politics, and municipal life, he made his influence felt. He was knighted in 1918.

Irish Technical Education.

THE eighteenth annual report of the Department of Agriculture and Technical Instruction for Ireland, which has recently been issued, is evidence of the fact that, whatever the political outlook may be, a comprehensive effort is all the while in progress to promote the prosperity of that country. We learn, for example, of the experiments made to render Ireland independent of imported limestone for glass-making. Active prospecting and development operations for copper are proceeding at Avoca, Co. Wicklow. It is proposed also to undertake prospecting work on the lead lodes near Glendalough in the same county. Boring operations for zinc in Tipperary, the development of copper ores at Castletown-Berehaven, of felspar deposits near Belleek, Co. Fermanagh, and of the lignite deposits at Lough Neagh, are either proposed or actually under way. The contemplated withdrawal of veterinary dispensaries, as a result of the unlikelihood of the people, for whom these establishments were set up, taking advantage of them, betokens apathy in even the best-laid Government schemes. During the year 181 samples of washing-soda were received for testing, of which 180 were of the standard of purity required for potato-spraying purposes. The other sample was found to be "commercial sulphate of soda." The Department impresses upon farmers the necessity of having the materials for making spraying mixtures tested and undertake the work at a normal fee of 3d. It is interesting to note that the Department tobacco expert afforded technical advice in the drying of medicinal herbs. The arrangement made last year at the botanical section of the National Museum for the identification, free of charge, of wild plants was evidently taken advantage of, for this has been continued. The study of a new tomato disease, stated to be due to a new species of *Phytophthora*, has been provisionally completed, and the results will be published as a scientific paper. The chemical division of the Department reports that 775 specimens were examined during the year. Amongst these were the following:

Fertilisers	120	Copper sulphate	196
Lard	1	Washing soda	179
Bees' wax	1	Caustic soda	5
Sugar beets	1	Grub preventive	1
Flax seeds	41	Henbane	3
Limestone and calca-		Belladonna	1
reous materials	13	Polishes	2
Spraying materials	3	Drugs (veterinary)	2

The value of kelp exported was almost 30,000l. The bulk of this product is prepared on the coast-line between the river Shannon and Lough Foyle. The report states also that signs are not wanting of a greater demand, in future, for instruction in chemistry, especially of an applied character. Under the heading of "Technical Instruction" much of educational interest is outlined, including a scheme for the training of apprentices in general. It is stated also that the College of Science Volunteer Aid Detachment (Nursing Division) was responsible for an output of 878,767 dressings, bandages, and cushions of sphagnum moss up to July 1918. Many other undertakings, obviously of much interest and value, additional to those mentioned herein, are reported on in the volume which comprises altogether 250 pages.

Marriages.

BLACOW—WHITTAKER.—At the Parish Church, Lancaster, on June 9, Norman Blacow, chemist and druggist, to Maud, third daughter of Mr. J. W. Whittaker, Regent Street, Lancaster.

BRYANT—OLIVER.—At Malvern, on June 5, Harold Leslie Bryant, chemist and druggist, only son of the Rev. James Bryant, Stourbridge, to Marion Emily, only daughter of the Rev. Samuel Oliver, Malvern.

JOHN—ANNAL.—At the Congregational Church, Melksham, on June 4, George Davies John, chemist and druggist, to Grace Elizabeth Annal, chemist and druggist, youngest daughter of Mr. H. S. Annal, chemist and druggist, Bank Street. In addition to the bride, her father, and the bridegroom, the bridesmaid (Miss Jessie Davies) is a pharmacist; and among those present were several students from the Bath College of Chemistry and Pharmacy.

KIRKWOOD—STAINER.—At Radnor Park Congregational Church, Folkestone, on June 5, by the Rev. J. E. Harlow, assisted by the Rev. K. S. Whitehead, John Kirkwood, B.Sc., M.I.E.E., only son of Mr. Adam Kirkwood, Greenock, to Nancy Stainer, B.A., Hons. Econ. (Wales), elder daughter of Mr. J. W. Stainer, Ph.C., F.C.S., Folkestone.

LANG—MCMILLAN.—At Benvaren, Ayr, on June 4, by the Rev. James P. Wilson, B.D., Robert Ralston Lang, Ralston, Aidrie, to Helen Grace Caird, youngest daughter of Mr. James M. McMillan, chemist and druggist, Ayr.

LAWRENCE—WOLLEY.—At the Parish Church, Clun, on June 3, by the Rev. H. J. Scott, assisted by the Vicar, George Rowland Lawrence, chemist and druggist, eldest son of Mr. G. R. Lawrence, Ph.C., Rhyl, to Annie Madeline, second daughter of the late Mr. T. S. Wolley.

TURNER—LELASSEUR.—At St. Mary's R.C. Church, Croydon, on June 7, by the Rev. Father McLaughlin, P.P., assisted by the Rev. Fathers J. Crea and J. Corbett, Alec Cornish Prew, third son of Mr. Henry Turner, Craighleigh, Brixham, to Desirée Céline, third daughter of Mr. Philippe Auguste Lelasseur, chairman of John Jakson & Co. (Mitcham Road), Ltd., Mitcham Villa, West Croydon.

Deaths.

GRAHAM.—At Cherry Mount, Sheffield, on June 7, after a long illness, Mr. Andrew Ward Graham, chemist and druggist, aged sixty-three. Mr. Graham, who was a native of Workop, went to Sheffield in 1872 as an apprentice to the late Mr. Robert Bennett. After qualifying in 1878, he took over the business of the late Mr. F. Hudson, which he carried on till his retirement in 1913. He leaves a widow.

HALL.—At Redruth, on June 9, Mr. Samuel Godfrey Hall, eldest son of the late Mr. Samuel Hall, F.I.C., F.C.S., aged forty-four. Mr. Hall was a director of Edward Cook & Co., Ltd., Bow, London, E. 3, till the year 1915, when he retired from the board. Since 1896 he had been a member of the Society of Chemical Industry. Shortly after the outbreak of war he joined the Second East Anglian Brigade, R.F.A., Ammunition Column, attaining the rank of captain; subsequently, he was invalided out of the Army.

MASON.—At Hull, on June 6, suddenly, Mr. John Alfred Mason (Mason & Booth, Ltd., chemists, Prince's Avenue), aged sixty-four. Mr. Mason, who was a native of Bradford, had been in business in Hull for over thirty years.

MUNDY.—At Canterbury Road, Leyton, on May 18, Mr. Alfred Jones Mundy, Ph.C., aged fifty-two.

SQUIRE.—At Basmead Manor, St. Neots, on June 10, after a short illness, Ann Fanny, daughter of the late Mr. Peter Squire and sister of Sir Peter Wyatt Squire, Ph.C., F.C.S., F.L.S., aged seventy-five.

STRANG.—At 22 King Street, Perth, on June 8, Mr. Peter Strang, chemist and druggist, aged sixty-seven. Mr. Strang was born in Perth, and began his career in pharmacy there as an apprentice to his father. His whole business life was spent in the town, with the exception of a short period during which he was gaining experience at Halifax. He qualified in 1873. On the death of his father in 1885 he succeeded to the business; there was a large dispensing and prescribing connection, and Mr. Strang became one of the most popular chemists in the district. His stock of good stories was apparently inexhaustible; and on summer mornings all classes of the community were represented in a sort of miniature Parliament that gathered in his shop. He detested "flash" travellers—especially English ones—and gave them an icy reception. Although he took no part in public affairs, Mr. Strang was deeply interested in all that pertained to the welfare of his country; he was an ardent reader, a lover of music, and a supporter of the Wilson U.F. Church. He is survived by a widow, a son, and a daughter.

Society of Public Analysts.

A meeting of the Society of Public Analysts was held at Burlington House, on June 4, Dr. Samuel Rideal (President) in the chair, when a paper on *The Examination of Commercial Samples of Nicotine*, by Mr. Percival J. Fryer, was read. The author reviewed the existing methods for the estimation of nicotine, and followed with special remarks upon the refractive index as a means of estimating the amount of water present in nicotine solutions, whether the nicotine exists free or as oxalate or sulphate. The question of other possible and likely adulterants was also considered and briefly discussed.—A paper on *Mexican Insects in Poultry Food* (*Notonecta*, *Corixa*, and *Mexican Cantharides*) was given by Mr. T. E. Wallis. Certain poultry spices and foods contain insects, either whole or powdered, which have been identified as consisting mainly of species of *Notonecta* and *Corixa* coming from Mexico. These insects form a regular article of commerce, and have also been sold under the name of "Mexican Cantharides." Photographs, drawings, and descriptions of the insects were given to enable the analyst to identify them whole or broken.—Messrs. W. R. Schoeller and A. R. Powell then gave *A Rapid Method for Determining Nickel and Cobalt in Ores and Alloys* (Part III.). In this, the last paper of the series, the estimation of nickel and cobalt in various alloys was described. They are precipitated by adding solid potassium iodide to a strongly ammoniacal tartrate solution. Manganese is estimated colorimetrically in the cobalt precipitate if in small quantities. If there is much manganese it must be eliminated by precipitating the nickel and cobalt as sulphides or xanthates.—A note on *The Oil of Ceratotheria sesamoides* was given by Mr. E. Richards Bolton. It was stated that *Ceratotheria sesamoides*, which grows on the Gold Coast, is closely allied to *Sesamum indicum*. The seeds are very similar, and so are the oils; in fact all the analytical results which are given in the paper, with the exception of the Baudouin reaction (negative for *Ceratotheria sesamoides*), might be given by sesame oil. The oil would be useful in edible products.—According to the paper by Mr. R. C. Frederick on *An Improved Method for the Estimation of Nitrates in Water by Means of the Phenolsulphonic Acid Reaction*, nitrates associated with chlorides up to 100 parts chlorine per 100,000 can be very accurately estimated by using a phenolsulphonic-sulphuric acid mixture. The colour produced by the nitrates, which is very pure, is compared with that produced by a standard ammonia solution.—Another paper dealt with the *Estimation of Morphine in Indian Opium*. The authors (Messrs. Jitendra Nath Rakshit and Frank J. D'Costa) compared results obtained by the lime and polarimetric methods of estimating morphine in opium, and, as a result of their experiments, they are of opinion that the polarimetric method offers certain advantages.

Trade Notes.

TOOTH-BRUSH BARGAINS are the feature of the advertisement of May, Roberts & Co., Ltd., 7-13 Clerkenwell Road, London, E.C. 1.

STOCKTAKING.—F. Newbery & Sons, Ltd., 27 and 28 Charterhouse Square, London, E.C., are closing for stock-taking on June 26, 27, and 28.

J. G. INGRAM & SONS, LTD., the East London Rubber Works, Hackney Wick, London, E.9, are to occupy Stand 60 at the Chemists' Exhibition (July 14-18).

CAMWAL LEMON POWDER is neatly packed and just the thing to push during the hot spell. It is referred to in the advertisement of Camwal, Ltd., in this issue.

ERASMIC SOAP.—The retail prices of "Peerless" and "Elite" Erasmic soaps are now 6½d. per tablet, 1s. 7½d. per dozen, the increase being necessitated by the advance in raw materials.

AQUAPERIA BOTTLES.—Owing to the shortage of bottles Camwal, Ltd., are prepared to purchase from chemists empty bottles at 2s. 6d., carriage paid, or 2s. if collected. Chemists will oblige the company by helping in this way to neutralise the scarcity of bottles.

AVILLIA OILS OF FLOWERS are offered in bulk or packed ready for retail sale in 1 oz. bottles by "Avillia Perfumery," 95 and 97 Charlotte Street, London, W. 1. These oils are prepared by macerating flowers in pure heavy mineral oil, very fine perfume oils resulting.

INTRAMINE is being extensively advertised in the medical journals, and chemists are likely to receive inquiries about it from doctors. Particulars are given this week in the advertisement of The British Drug Houses, Ltd., 22-30 Graham Street, City Road, London, N. 1.

ORGANIC SILVER SALTS.—The Chemical Works Madoery, Ltd., Basle, Switzerland, specialise in organic silver compounds—silver proteinate and nucleinate—which are much in demand in this country. The other drugs and chemicals for which the company are exceptionally well placed are male-fern extract and rennet powder.

DULC-O-DO.—This is the name of a toilet lotion made by the Scott's Chemical Co., 47 Huddlestons Road, Willesden, London, N.W. 2, which relieves excessive perspiration from the armpits, feet, and hands. The directions for use require to be carefully followed. A testimonial from a medical man, of which a copy has been sent us, shows that Dulc-o-do has exceptional merits.

CHEMISTS' EXHIBITION.—The twentieth Chemists' Exhibition is to be held at the Northampton Polytechnic Institute, St. John Street, Clerkenwell, London, E.C., from July 14 to July 18. It is anticipated that the Exhibition will be of an exceptional character, owing to the coincidence of peace and the opportunity which will be afforded of obtaining ideas for reconstruction. Particulars are given in an advertisement in this issue.

"SURE PHOTOGRAPHY."—Burroughs Wellcome & Co., Snow Hill Buildings, London, E.C. 1, send us a copy of a new photographic booklet entitled "Sure Photography." This is published for the users of "tabloid" photographic chemicals, but it contains much valuable and practical information which all amateurs will be interested to have. It has an attractive cover, and, judiciously distributed, should promote photographic business.

COX'S JUBILEE.—This issue contains an eight-page advertisement of Arthur H. Cox & Co., Ltd., Brighton, commemorating the foundation of the business fifty years ago. We reprint the following account of the early days of the business, which we gave in the Summer Number 1910, in connection with the jubilee of THE CHEMIST & DRUGGIST:—

In 1859 Mr. Arthur Hawker Cox was in business at Ship Street, Brighton, and was in his forty-sixth year. He had been apprenticed to his uncle, Mr. Perrin, of Northampton, after which he was an assistant with Mr. Charles Dinneford, New Bond Street, London, and started in business in Brighton on June 14, 1859. At that time pills were made elegant by coating them with gold or silver leaf. French

pharmacy usually gets the credit of having introduced gelatin-coating, but William Palmer, an Englishman, was before the French, he having obtained in 1842 his first patent to cover his process of applying gelatin to pills. This was overlooked, and books of the period do not mention Palmer, but attribute the process to the French. Sugar-coating was also used in the 'forties. Pill-coating was a subject in which Mr. A. H. Cox experimented for some years, but it was not until April 1854 that he sought provisional protection for the coating of pills and boluses with a gum or resin insoluble in water, but acted on by the stomach, an elegant appearance being imparted to them by powdered French chalk or other powder. This was the introduction of his system, and Mr. Cox's patent, engrossed on a large sheet of parchment with pendant official seal, is still treasured by his successors, as also is a small case containing a gross of the first pills which were ever pearl-coated. Part of the process was secret, and this is still jealously guarded. Mr. Cox became an Alderman of Brighton, and was three times Mayor of the town. His pill-business grew beyond the facilities of the Ship Street premises, and in 1871 he erected a factory in St. Martin's Place. In 1889 Mr. Cox "commenced retiring" by handing the control of affairs over to his two sons, Mr. Arthur H. Cox and Mr. Edward E. Cox; but it was not until his death on April 6, 1903, that he ceased to be active in the business. After that date the business was formed into a limited company, for family reasons, and the shares are still in the hands of the Cox family, who conduct the business personally, Mr. Arthur H. Cox and Mr. Edward E. Cox being joint managing directors, and, as our readers are aware, they are among the most enterprising men in the British drug-trade.

Since this was written the company has fully maintained its rate of progress, and what it is like to-day can be gathered from the inset which is given with this issue.

Information Department.

INFORMATION WANTED.

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated.

179/41. Kola red oil for pneu-	184/15. "Abrodigine"
monia	184/15. "Norwich" tooth paste
182/63. Japanese foot powder	183/68. Oil of Lustrina
183/1. "Desco"	185/10. Deions, Ltd. present
183/1. Court plaster, "H.B."	address—
M.	185/49. "Eskell" smoker's
184/16. "Duo" formula	tooth powder

INFORMATION SUPPLIED.

Inquiries regarding the following articles have been answered. The information as to supply will be given to others who send a stamped, addressed envelope to the Information Department, THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C. 4:

Arsenobenzol (Billon), 157/15	"Pepsoral" tooth paste, 124/40
Asbestos socks, 175/23	Pessary moulds, 159/42
"Astra" brand fine glassware, 109/41	Petrole-Hahn, 17/55
"Atlas" preservative, 128/40	Petroleum jelly, 158/68
Barry's pearl cream, 171/44	"Phormoid" tablets, 119/69
"Big Bat" cement, 138/50	Pieric acid (Belgian inquiry), 158/44
Bottle-washing machinery, Chamois leather, 168/47	"Pinex," 165/8
Chaulmoogra oil, 131/16	Potassium ferrocyanide (Belgian inquiry), 158/44
Chavain's filters, 152/13	Potassium permanganate (Belgian inquiry), 158/44
Citronella oil, 149/66	Rennet, 160/69
Collapsible tube-filling machinery, 129/11	"Rexall" preparations, 144/42
Copper sulphate, 172/64	"Ridakoff," 79/51
Cork discs, 147/14	Robb's biscuits, 157/23
"Enesol," 171/40	Roches' embrocation, 78/45
"Ensign" films, 167/46	Roger and Gallet's toilet specialities, 101/13
Entomological apparatus, 93/64	Rouge (jewellers'), 91/35
Formaldehyde (Belgian inquiry), 165/33	"Saliuette," 171/39
"Frozocone," 157/23	Saponine (Belgian inquiry), 158/44
Gillette safety-razor blades, 120/48 and 128/46	Savon "Amiral," 121/30
Glycerin, 158/68	Scales, dispensing, 83/32
Juniper tar soap, 143/57	Schumann's preparations, 114/7
"Kanok" blades, 153/56	"Seedolin," 88/40
"Kapurine" powders, 129/73	Seeds (suppliers), 72/20
"Kruschen" salts, 75/8 and 114/53	Seeger's hair dye, 119/69
"Lactogen," 136/5	Seltzogenes, 116/42
Lalor's, Dr., phosphodyne, 142/64 and 177/63	Shellac, white, 125/33
Lemongrass oil, 149/66	Sulphuric acid, 107/57
Le Pages' liquid glue, 63/9 and 118/74	Suppository moulds, 144/24
"Lotus" lily perfume, 161/6	"Syracuse" suspensory bandage, 147/66
Magnesium chloride (French inquiry), 121/67	Syrup of figs, 41/4
	Tablet-counting machinery, 50/45
	Terpineol, 116/39

Observations and Reflections.

By Xrayser II.

The Bargain

between us and the Privy Council is at last exposed; the price we have received for conceding registration to unexamined men is the grant to us of power to impose a curriculum on our own students, excepting those only who have been serving in the army. So says the official organ of the Society in a laboured attempt to justify the Council's action. Was there ever a more ridiculous bargain made? The enforcement of a curriculum is at best a doubtful good, only approved by us as a body because of collateral advantages accompanying it. In itself it was strongly opposed by a large section of the Society, and its necessity has never been proved to the satisfaction of the majority of pharmacists. Yet to secure it we give up the principle on which it is based, and render it nugatory to an extent which nobody can foresee. Like the dog in the fable, we lose the substance in grasping at the shadow. The curriculum has yet to be proved, but whatever its advantages, it is not worth the price we pay for it. It had obtained a factitious value in some eyes through the advocacy of two or three influential members of the Council, and we are now being sacrificed to their fetish.

The Argument

by which it is sought to show that we are powerless in this matter is not convincing. It is admitted that we can refuse the new by-law if we dare, but it is contended that by doing so we shall create an atmosphere of suspicion and distrust between ourselves and the Privy Council, and render the Pharmacy Acts "practically unworkable." The answer is twofold: the relationship between the Society and the Privy Council is already one of suspicion and distrust, and the Pharmacy Acts are not only being made unworkable, but will have actually broken down when the by-law comes into force, for the root principle of those Acts is that nobody shall be admitted to the practice of pharmacy without examination. Mysterious hints are thrown out also as to what the Privy Council may do if we defy it. Very well; let it do them. Better the Society, as such, should perish in defence of that for which it exists than deny its own *raison d'être*. But it would not perish. The Privy Council is not Fate nor even Government; it is pushed on in this matter not by its own will, much less by any demand from the people for whose welfare it is supposed to exist, but by a few interested individuals whose motives only need to be exposed to be discredited. If we have but courage enough we may be sure of victory if things should come to a fight in Parliament.

A Good Reason

for not rushing this by-law through as the Council is endeavouring to do is found in the attitude of apothecaries' dispensers towards their own Society, as exhibited at their annual meeting of May 19. Clearly the dispensers are dissatisfied with their present position, and the extinction of the examination to which they are subjected is not only desired but demanded by a large number of them. I suggested a year or more ago that an understanding might possibly be brought about, a fraternisation, in fact, between our own assistants and these men, the result of which might be a solution of the difficulties existing between the two Societies, the Pharmaceutical and the Apothecaries'. If the Apothecaries' Assistants' examination were done away with, and a Pharmaceutical Assistants' examination were adopted, which each Society accepted, we might accept the proposed new by-law, as we should then be safeguarded against any further irruption of apothecaries' assistants into our ranks. All who have already passed the Assistants' examination would naturally be admitted to registration as pharmacists' assistants, and all would *ipso facto* come under the operation of the Pharmacy Acts so far as their future in the Society was concerned. For such a settlement it might, I say, be worth while to

waive the principle violated by the new by-law, for this occasion only, as it was waived in 1868, a very different thing from permanently admitting exceptions to it. The circumstances are not quite the same, but there seems to be reason enough here for going slow for awhile.

The Re-election of the President

was, of course, a foregone conclusion, but it is perhaps significant that, though the result of the ballot was received with applause by those who had voted for him, it was reserved for the official organ to sing his praises. It will, however, be salutary for Mr. Currie to remember—as, indeed, he seems to do—that such "complete confidence" in him as this vote may seem to indicate has not been always, and is not now, felt by everybody. He certainly has not justified all our hopes; his public utterances have frequently been unfortunate, to say the least; his attitude has more than once been irritable, and his action in Council (which is about all we have to judge by) has exhibited rather the spasms of weakness than the quiet strength demanded of his high office. That it has been a difficult and trying time for one fresh to office is true, and that Mr. Currie is sincerely devoted to what he conceives to be our good is equally true, but the truth of most importance for him if he desires our confidence is that he has still to win it.

"Loyalty to the Society."

said Mr. Campkin at Colchester the other day, "is due from every chemist." One cannot but wonder what he meant by loyalty. In view of what he had just before said of his own strong opposition to the new by-law he cannot have meant that it forbids opposition to the Council by every means in our power when we are convinced that its policy is wrong, and indeed he seems to have had chiefly in mind those who are not members of the Society. But in what sense can loyalty be due from them? Johnson defined loyalty as "faithful adherence to a prince," but we usually extend it so as to include the Government under which we live. The word comes from the same root as "legal," and Cowper says, "We too are friends to loyalty. We love the king, who loves the law." The root of loyalty then is not attachment to a person or a group of persons forming a Government, much less to a society, but obedience to law. Taken in this, the only reasonable sense of the word when used in such a connection, loyalty is, as Mr. Campkin clearly found it in his own case, compatible with the most strenuous opposition short of actual rebellion, which is the abrogation of all law; it does not forbid agitation for the most revolutionary changes in government. But I ask again, How can it be due from pharmacists outside of the Society? It is most desirable that they should come in, and nothing should be left undone that may induce them to do so, but there is no disloyalty in their remaining outside. Their debt to the Society, if they ever owed any, was discharged when they paid their registration fee, but, rightly considered, even this was a debt not to the Society but to the State.

Your Correspondent, "Economist,"

injuries a good case by a bad argument. He is right in saying that Panel chemists are not paid by Government so as to enable them to pay qualified assistants as they ought to be paid, but he goes a long way round to prove it, and the analogy on which he relies is a false one. School teachers are paid by public authorities assisted by a Government grant; theirs is a lifelong profession, and they have nothing to look forward to beyond it. We pay our own assistants, and unless Government were to fix their wages (which I dare say none of us desires), the increasing of our pay would only affect them indirectly, if at all. Moreover, Government pays us for a small portion of our work only, and our assistants are not employed exclusively upon that, nor are they assistants by profession, but pharmacists, with the prospect, in most cases, of being some day in business for themselves. It is, therefore, idle to argue, as "Economist" appears to do, that they should be treated as school teachers are, both as regards salary and vacations (not to mention pensions), because they deserve as much.

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LIQUORS

Editorial Articles.

Registration of Pharmacy Schools.

UNDER Section 28 of the Education Act, 1918, which came into operation on April 1, the persons responsible for the conduct of schools and educational establishments in England and Wales are required (with certain exceptions) to send to the Board of Education, Victoria and Albert Museum, South Kensington, London, S.W. 7, before July 1, the name and address and a short description of the school or institution. We published this notice in THE CHEMIST AND DRUGGIST on March 8 (p. 47), and quickly this raised the question whether schools of pharmacy are required to furnish the particulars referred to. We accordingly wrote to the Board of Education about the matter, pointing out that the pupils at schools of pharmacy are over school age, and hence it is not clear whether these institutions require to register under the Education Act. The Board has now informed us that they have no authority to decide the question, which, in case of dispute, is one for the Courts to determine. The letter continues:

I am, however, to point out that the only obligation at present imposed by Section 28 of the Education Act, 1918, is to give the name and address of a school or institution, together with a short description of it. It is clearly impossible for the Board to form any opinion on the matter unless they possess a short description of the institution, and they will be glad if proprietors of schools of pharmacy will apply to them for copies of Form 451G, which is the form prescribed under Section 28 (1) (a), and return them, duly completed, not later, than July 1, 1919. A copy of the form is enclosed for your information.

The Board will not regard this as in any way prejudicing any claim that the proprietors of schools of pharmacy may desire to make in the future that they do not conduct schools or educational institutions within the meaning of that Section.

The form referred to above has space for (1) name and full address of the school or institution; (2) short description of the school or institution. The description is required to state (a) the type of education provided (elementary, secondary, technical, professional, or otherwise); (b) the number and sex of the pupils and usual age of entrance and leaving; (c) whether the school or institution is for day pupils or for boarders, or for both; (d) whether it is conducted for private profit; (e) the body of persons responsible for its management. In this connection it is interesting to mention that the schools of pharmacy are at present being inspected on behalf of the Pharmaceutical Society by Major E. Saville Peck and Mr. Frank Browne, so that the schools can be certified as suitable for the reception of demobilised soldiers who are to receive Government grants to enable them to continue studies interrupted by the war. It is not unlikely, however, that, apart from subsidised students, most of the schools will be full up for some time to come, as many persons entitled to grants have come to the conclusion that the Government does not really intend helping them. In this respect credit is due to the War Auxiliary Benevolent Fund, which has made many grants with commendable promptitude and spared a good few young men from wasting time waiting for the materialisation of the Government schemes.

Chemists and Dental Practice.

It would not be safe to assume that because the Parliamentary machine is admittedly overworked already it cannot be urged to put through a measure which has sufficient driving force behind it. For this reason we think that chemists ought not to overlook the possibility of legislation on the lines of the recommendations contained in the recent report of the Departmental Committee on the Dentists Act, 1878. Any such change in the law ought to be closely scrutinised if the interests of chemists and druggists are to be properly safeguarded. The evidence taken before the Committee has not yet been published, but broadly stated the Committee come to the conclusion that the law as it at present stands as to the practice of dentistry is unsatisfactory, and that this is to be attributed to the fact that the law allows too great freedom of action to unregistered practitioners. With the desire of the Committee to secure an improved national dental service we are in entire agreement, but, as we have stated before, in some important points we are unable to adopt the point of view or accept the conclusions of the Committee. The report was recently discussed by the General Medical Council on a report by the Dental Education and Examination Committee of that body. Sir Charles Tomes, Chairman of the Dental Committee, said "there is every hope that the report will be taken notice of by the Government, but immediate pre-occupations stand in the way." The following recommendations were approved of after discussion:

(1) That the Council should express its approval of the main general principle of the report—viz., that the practice of dentistry by unregistered persons be totally prohibited. Conditionally on such prohibition being adopted, that certain unregistered persons engaged in practice prior to the publication of the report (February 1919) who fulfil certain conditions laid down in the report should be admitted to registration.

(2) That the Council should express the opinion that the five years of *bona-fide* practice should be subsequent to the attainment of twenty-one years of age, and that a corresponding limit as to age be applicable to those who have been in practice less than five years and who are to be subject to a test examination; and that a corresponding age limit be required in the case of dental mechanics, for whom special provision is made in the report.

(3) That the Council should express the opinion that a Panel of Examiners should be nominated by the dental licensing bodies, as they alone have experience of the con-

duct of examinations in dentistry. From this panel examiners should be selected by a constituted authority to conduct any examinations required or demanded.

(4) That the Council approve the formation and proposed constitution of an *ad hoc* Committee to conduct the inquiry into claims for initial registration.

(5) That the Council should express the opinion that while the title "Dentist" or "Dental Practitioner" may be used by all those upon the Register, the restrictions suggested in the report as to the use of any other title whatever by those who are registered in respect of practice only should be enforced under penalty; and that the title of "Surgeon Dentist" or "Dental Surgeon" should be expressly reserved for those who possess a registrable licence or diploma in dentistry or dental surgery.

(6) That the Council approve the suggestion that a Statutory Board under the Council should be established for the control of the dental profession, the General Medical Council having the right to hear an appeal, should it think fit to do so.

(7) That the Council is not in a position to give effect to its resolution until it is known what steps will be taken to give legislative effect to the recommendations of the Departmental Committee.

(8) That the Council should express the opinion that a satisfactory dental curriculum can be framed on the basis of the suggestions set forth in the report.

(9) That the Council take strong objection to the creation of a special class of "managers" of dental companies, who would not be registered dentists.

(10) That the Council would welcome legislation for providing for reciprocity of recognition with the Dominions and foreign countries.

(11) That the Council request the Lord President to afford it an opportunity of considering at an early stage any legislative proposals which the Government may contemplate for giving effect to the recommendations of the report.

It is useful to reiterate the objections to the findings of the Departmental Committee. In the first place, we think there has been too great a tendency to regard "registered" as synonymous with "qualified." This is all the more extraordinary when we see that so many persons had come on to the Register under the Act of 1878 whose qualifications to practise dentistry could only be regarded as of the most meagre character. Then, again, we find that the Committee have been possessed by the view that anyone admitted to practise dentistry should not as a rule practise any other profession. So much have they been under the influence of this, that they recommend that companies practising dentistry should not carry on any other business or trade. It is against the application of this principle in any Act which may be passed that pharmacists may require to take precautions if they are not to see themselves deprived of well-established privileges. The report appears to us to display an exceptional disregard of the legitimate rights of pharmacists as a class in regard to the practice of dentistry. While it recommends that for the future dental practice should be confined to registered practitioners, it saves the existing vested rights of unregistered practitioners by proposing that anyone who has been engaged continuously in the practice of dentistry by performing dental operations within the month for the period of five years before the date of the report should be entitled to have his name placed on the Register on payment of the registration-fee. As regards chemists as a class, the attitude of the Committee is more unsympathetic, and, as we think, unjustifiably exacting. It is recommended that chemists who are at the present time unregistered practitioners of dentistry, and who are on the strength of their practice to be admitted to the Register, should, within a period of five years from registration, select which profession—that of chemist or that of dentist—they intend to follow, and give an undertaking to the General Medical Council that they will not concurrently practise both the professions. And in the case of unregistered persons practising dentistry, whose names are included in the Register of Pharmaceutical Chemists or in the Register of Chemists and Druggists, any of these upon applying to be registered would be required to satisfy the Committee established to control the profession that the applicant's practice of dentistry was a substantial one and included all usual dental operations. At the same time, the report does lip service

to the qualifications of pharmacists by giving the opinion that they would be suitable persons to undertake dental work in districts where such work was free owing to the absence of a registered dentist. In view of this expression it was not easy to resist the conclusion which was advanced by one of the witnesses that the report aims in reality at creating a monopoly in a privileged body in the name of the public interest. And even this policy is not consistently adhered to, for what reasons we are left to speculate. All legally qualified medical practitioners are at present, in virtue of their medical qualifications, entitled to practise dentistry on the same footing as registered dentists under the Dentists Act of 1878. The Committee do not propose to take away or curtail this privilege, although it runs counter to their cherished maxim that one person ought not, except in very special circumstances, to practise two professions. This concession to members of the medical profession is all the more noticeable when we consider how much the mechanical exceeds the surgical in modern dentistry. We can recall a case which went into the High Court in which the dentist's claim from his patient was 65*l.*, and of this only 4*l.* was allocated to work done on the patient's mouth. On such a basis a mechanic with practice in the preparation of the plates used in dentistry would have at least an equal title with a doctor to be placed on the Register. In contrast to this is the treatment proposed to be meted out to duly qualified chemists and druggists. No privilege of practising dentistry is to be allowed them from the fact that they are duly qualified in their own profession; and where they satisfy on other grounds the requirements for registration as dentists they must confine themselves to one only of the two professions. What we have said will be sufficient to show how necessary it will be in the interests of pharmacists closely to scrutinise any legislative project inspired by the report. The State wants an efficient national dental service, and the State is entitled to provide such a service as it can. If this proves efficient it can be trusted to hold its own against unregistered practice. But surely this reform can be carried out without drawing from chemists the right they at present enjoy to practise dentistry subject to the restrictions imposed by the Dentists Act, 1878. Something more than a mere theory of reform ought to be required before an educated class of men should be cut off from a practice which, as the Committee were informed, they have followed from time immemorial.

"The Unjust By-law."

We regret that last week we imputed to the Pharmaceutical Council an intention of rushing through the stages of the Apothecaries' Assistants By-Law when, as a matter of fact, the mid-monthly meeting of the Council on June 18 is only a continuation of that of June 4. Consequently, the obnoxious by-law cannot be read then. It will be read a third time at the Council-meeting on July 2, and, following precedent, it is likely that the general meeting of members of the Pharmaceutical Society, which must approve the by-law before it is sent to the Privy Council, will be held the same afternoon. It will thus not be possible for the members to be swayed by any of the arguments which Mr. Jenkin announces that he will bring forward on the third reading. The error into which we have fallen regarding the date of the third reading does not vitiate our arguments as to the unjustness of the by-law. The only objection we have heard to our view is that the Pharmaceutical Society is not strong enough to oppose the Privy Council. It does not follow, however, that a protest should not be made against the dictation of Civil servants, even if we have to give way eventually. That our views about Government Departments are not exceptional is shown by the following extract from a member's speech in the House of Commons last week:—

There is no government by Parliament in this country. It is government by permanent officials and Government Departments. I have spoken in the old days in my simplicity about government by the people, of the people, for

the people, but I had not been in Parliament long before I found that there is no government by the people in this Parliament. It is government by bureaucracy and by Government Departments. Strong a believer as I was in nationalisation before the war, that belief has somewhat wavered after my experience of Government Departments lately. There is no control by the elected representatives of the people who sit in this House.

To confirm this one has only to study the arrogant reply which Sir Harry Brittain received to a question he asked in Parliament last week (*C. & D.*, June 7, p. 69). The reply was doubtless supplied to Mr. Bonar Law by the Civil servants at the Privy Council Office, who resent the efforts of a member of Parliament to obtain some information about the by-law. We understand that Sir Harry wishes to know the extent of the experience which will be required from apothecaries' assistants before they can be registered as chemists and druggists. He is not over-politely told to mind his own business. The attitude of the Civil servants at the Privy Council has always been unreasonable so far as chemists are concerned. That the Privy Council will change its historic attitude if on the present occasion chemists meekly submit to the dictates of its officials is extremely doubtful. We have only to recall the action of the Privy Council in the matter of the "Report as to the Practice of Medicine and Surgery by Unqualified Persons," which was produced before any question arose of making by-laws under Section 4 (b) of the Poisons and Pharmacy Act 1908. This report, issued by the Privy Council, consisted of *ex-parte* statements by medical men, and chemists were not given an opportunity of refuting the grossly unfair attacks made upon them. If the members of the Pharmaceutical Society in general meeting decide to reject the by-law it will mean that if a by-law is to be made the Council must find a formula which will be just, not only to chemists but to the public. For example, although the Council must admit apothecaries' assistants without examination it should not be forgotten that the Act states that the applicants for registration must "*produce evidence satisfactory to the Council of the Society that they are persons of sufficient skill and knowledge to be so registered.*" Our view is that the Council must not only be satisfied in regard to the knowledge of dispensing possessed by the applicants, but must also require evidence that the apothecaries' assistants are otherwise equipped for carrying on the business of a chemist and druggist. One of the chief functions of a chemist is to safeguard the public from accidental or intentional poisoning. In the interests of the public it is, therefore, imperative that the Council should not be "satisfied" until some evidence is produced that the persons seeking admission to the Register of Chemists and Druggists possess some knowledge of the sale and storage of poisons. It would also be well if all those who were concerned in the Parliamentary "deal" in 1908 would make a clean breast of the actual state of affairs; we do not think chemists would treat them harshly if it were shown that an honest mistake was made at the time. So far, Mr. J. R. Young, who was President of the Pharmaceutical Society then, has said nothing in public about the "deal." He is still a member of the Council, and has, we believe, been present at the last two Council-meetings at which the by-law has been discussed. Why does he maintain silence?

The Position of Quicksilver.

In several of our previous issues we have alluded to the chief reasons which have led to the remarkable revival in the world's demand for quicksilver. This demand has not been confined to the London market, as it would appear to have been first felt in the United States, where the price was particularly depressed in the earlier part of the year, probably in consequence of the eagerness to work off surplus Government holdings accrued during the war. Towards the end of February the American price had already fallen to well under \$90, and the depression became accentuated within the next two months, thus indicating that the "tap" was still on.

which resulted in the price collapsing to \$67 early in April. America was then probably a keen competitor in the export markets. This is apparent from the fact that the total American exports during March amounted, according to Washington returns, to 83,150 lb., representing over 1,108 bottles. The exports for that month were as follows: Japan, 36,000 lb., valued at \$43,020; Hongkong, 34,500 lb. (\$41,410); Denmark, 9,150 lb. (\$18,300); and Sweden, 3,500 lb. (\$6,600). Subsequent exports have doubtless increased, while the sharp turn for the better which asserted itself in April served to accelerate the demand from foreign as well as domestic sources. Simultaneously with the quick picking-up of the demand in our market and the successive sharp advances recorded, the American price has been soaring lately to over \$82 per bottle, and, judging from the advices coming to hand, the appearance of the market is still strong, inasmuch as it is stated on good authority that the whole American surplus has been practically scattered. While the American position is now of particular interest, the future of the market will presumably be chiefly governed by the attitude of the chief importers in this country, who are undoubtedly in a position to meet the export demand, provided adequate freightage facilities can be secured. Our imports for the month of May were 258 bottles only, making a total of 12,508 bottles for the five months, which compares with 4,487 bottles for the corresponding period of last year and 103 bottles two years ago. Outside of the United States the chief world's producers are, as is well known, Spain, Italy, and Austria-Hungary. So far as can be ascertained, the handling of the Italian product is also in the hands of the chief home importers, who thus control both the Spanish and Italian output, while the fact that no offers are being heard of f.o.b. Italian ports tends to strengthen the assumption that the bulk of the Italian supply is now practically destined for this country under peace conditions. In such circumstances there would be no serious competition between these two important sources of supplies, which are practically under single control, and London can thus be regarded as the leading factor in the world's markets. There seems to be a good deal of uncertainty, having regard to the future prospects of the mining industry, and it is hardly possible to form any opinion of prospective consumption. With the advent of peace it is only too obvious that much less quicksilver will be required for munition-making, but rather divergent views prevail on the use for such a purpose, while a prominent American metallurgist has expressed the opinion that some of the modern applications that sprang from the exigencies of war are not unlikely to persist. It is quite possible that the industrial use of the metal under peace conditions will be greater henceforth than it ever was before the war, and that it may continue to increase until diminishing supply and rising values force the extensive employment of substitutes. Returns of the world's production of quicksilver for 1917 give the following figures: United States, 36,159 flasks; Italy, 29,300 flasks; Spain, 25,133 flasks; Austria-Hungary, 27,500 flasks; other countries, 4,500 flasks; making a total world's production of 122,592 flasks. As seen by these figures, the United States output was the largest of all. The circumstances under which the output was forced from 16,549 flasks in 1914 to 36,159 flasks in 1917 were altogether exceptional and due to the pressure of the War Industries Board. Of this total enhanced production for 1917, only comparatively small quantities came from new mines opened during the war, and it is held that not one of these promises to develop a production of 1,000 flasks or more annually. Possibilities of greater production may exist in some parts, but, as years pass, general prospects in this respect are diminishing. The price may be expected to affect the output, but it can hardly change the physical conditions upon which production fundamentally depends. The high prices secured during the war nearly trebled the American annual output, but it is held that the same or even higher prices could not again lead to the same result. The forecast, as a matter of fact, has been made

that during the next ten years the American annual production may be expected to fall to about 15,000 flasks, or to a little under what it was in 1914. The current production is seemingly confined to about half a dozen mines, since the other United States mines have, so to say, fallen by the wayside on account of the greatly increased cost of production. Ordinarily, the New Idria Quicksilver Mining Company accounts for one-third of the country's output, but to-day it produces a full 50 per cent. of it. The returns of this concern for the four months ended April 30 last were only a little over 2,000 bottles, against a monthly production of fully 900 flasks for the two previous years. Operations were, since last autumn, curtailed by 50 per cent., but now that the accumulated surplus has been worked off, and the company can market its product on a profitable basis, its output may be reasonably expected substantially to increase.

Medical Dispensing.

THERE is a quiet movement on the part of medical practitioners on the panel of the National Insurance Act to obtain more control over that part of the Drug Fund which is applied in payment of dispensing. This should be carefully watched. Last week (p. 52) we printed the views of the Insurance Act Committee of the British Medical Association. The ingenuousness of the suggestions regarding the supply of drugs in rural areas will have been noticed. The London Panel Committee, at its last meeting, reported that:

A Joint Committee, representing the Insurance, Panel, and Pharmaceutical Committees, has been appointed to deal with the early closing of chemists' shops, and to provide facilities for dispensing urgent prescriptions after 8 o'clock p.m. A review of the complaint cases dealt with by the Pharmaceutical Service Sub-Committee has forced the Committee to the conclusion that the decisions of that Committee do not help towards a mitigation of the difficulties experienced by insured persons in obtaining drugs and appliances. The number of complaints of delay in dispensing medicines, short measure, inferior quality of drugs, and in some cases rudeness on the part of chemists and their assistants, has led the Committee to press on the Commissioners and the Insurance Committee the view that "some revision of the method of supplying drugs and appliances is urgently necessary."

It is almost time that pharmacists started a campaign about the indifferent treatment which insured persons receive from panel practitioners. Many chemists could give interesting evidence on this matter.

Overseas Trade in May.

FURTHER improvements in both imports and exports are recorded in the Board of Trade Returns for May. Imports reached 135,700,000l., or 9,750,000l. more than in May last year, and exports totalled 64,345,000l., or 19,377,000l. more. A decrease of 2,775,000l. is recorded in imports of chemicals and the like, purchases amounting to 1,550,000l. only. There was a big decline in acetic acid, imports falling from 21,690 cwt. to 4,450 cwt., but the unenumerated class of chemicals fell from 2,799,000l. to 234,000l. compared with May last year. Only 17,896 oz. of quinine products was entered during the month, but the total for the four months (1,253,792 oz.) is slightly more than the corresponding period of 1918. The export side of the returns is remarkable for the fact that manufactured goods exhibit an advance of 12,335,000l., practically every item in the schedule contributing. The chemical trade continues brisk on export account, an increase of 542,200l. being recorded, shipments attaining 2,568,000l. There was a marked revival in bleaching-powder and coal products (not dyes). Medicines were exported to the value of 395,761l., or 43,700l. more, while the larger quantity of 185,040 oz. of quinine was released.

THE VERDICT OF THE MAJORITY.—A medical man who had abandoned hope of one of his hospital patients told the nurse (asserts a correspondent) to ask him what he would like best. "Bagpipes," was the reply; accordingly bagpipes were duly provided. On asking the result the next day, the doctor was told that the man in question was much better—but that the rest of the patients had died!

Westminster Wisdom.

By the "C. & D." Parliamentary Representative

IMPORTS OF BRUSHES FROM JAPAN.

Sir R. Cooper, on June 4, asked the President of the Board of Trade what was the value of brushes imported from Japan into the United Kingdom during each of the first four months of 1919 and 1914, respectively.

Sir A. Geddes replied: The value of brooms and brushes registered as imported into the United Kingdom from Japan during each of the months specified was as follows:

	1919	1914
	£	£
January	86,230	4,094
February	106,360	3,104
March	117,358	3,341
April	86,084	2,324
Total, four months...	396,032	12,863

HONEY SUPPLY AND BEE DISEASE.

Sir Fortescue Flannery (Maldon, Essex) asked the Food Controller on June 4 to state the total quantity of honey produced in England in each of the five years ending December, 1918; whether, having regard to the reduction in the quantity of honey due to the spread of the Isle of Wight disease to the hives, he will take steps to introduce regulations to stamp out that disease.

Mr. Pratt (Junior Lord of the Treasury), who replied, said: The Board are unable to supply the information asked for in the first part of the question, inasmuch as beekeepers make no returns of the amount of honey they obtain each year. As to the latter part of the question, the Board are promoting research and investigation into the nature and causes of the Isle of Wight disease, with the view of ascertaining the best means of remedy and prevention. Should there be any prospect of controlling or eradicating the disease by legislative measures the Board will take steps to obtain the necessary authority.

POTASH FROM GERMANY.

Mr. Holmes, on June 5, asked the President of the Board of Trade whether the Government have received 30,000 tons of potash from Germany; whether this was received in exchange for other commodities; and, if so, what, and how the Government propose to dispose of the 30,000 tons?

Mr. Bridgeman replied: No supplies of potash from Germany have been received by His Majesty's Government, but negotiations are taking place for the delivery of 22,500 tons in terms of pure potash, for which Germany will be allowed credit against her food account. The potash so delivered will be disposed of by the Board of Trade in consultation with the Board of Agriculture and Fisheries and the various trade interests concerned.

Mr. Gershom Stewart: Can he say what prices we are paying Germany for potash?

Mr. Bridgeman: No, I cannot without notice.

NATIONAL INSURANCE ACT.

Sir K. Wood, on June 4, asked the Secretary to the Local Government Board, as representing the National Health Insurance Commissioners, whether it is proposed to introduce legislation in connection with the amount of the income limit under the National Insurance Act.

Mr. Pratt replied: It is not proposed to make any alteration of principle as regards the range of persons who were intended by the Act of 1911 to come within the National Health Insurance, nor to bring in any class of the community not hitherto included. No alteration is contemplated in the 160*l.* limit for voluntary contributors. But I hope to introduce a short Bill for the consideration of Parliament after the Recess, for the purpose of preventing the deprivation of benefits that will otherwise take place after June 30 in the case of that large number of insured persons whose wages have been raised since the

war so as to be at a higher rate of remuneration than 160*l.*, but who have not thereby been raised above the economic status of the persons comprised in the Act of 1911.

TRADE BOARD FOR DISTRIBUTIVE TRADES.

Mr. Sturrock, on June 4, asked the Minister of Labour whether he is aware that the proposal to establish a Trade Board in London to deal with conditions affecting the Scottish distributive trades is causing dissatisfaction; and whether, in view of the many particulars in which Scottish and English customs differ, he will set up a Scottish Board located in Scotland and consequently more closely in touch with Scottish trade and more easy of access to Scottish traders.

The Minister of Labour (Sir R. Horne), who replied, said: No decision has yet been reached as to the number of Trade Boards to be established for the distributive trade, and the whole question is being carefully considered in consultation with representatives of the various interests affected. I fully appreciate and sympathise with the standpoint of those who desire that a separate Board should be established for Scotland, and, as the Parliamentary Secretary to the Ministry of Labour recently informed a deputation representing important sections of the distributive trade in Scotland, this question is receiving my careful consideration.

MEDICINE STAMP DUTY.

Mr. R. McNeill, on June 6, asked the Chancellor of the Exchequer if he is aware of the inconvenience caused to pharmacists and the public by the incidence of the stamp duty on proprietary medicines since 1915, when the stamp values were doubled, whilst the values coverable by the stamps were unaltered, which increase has added greatly to the inconvenience of the insufficient graduation of the duty; whether he is aware that manufacturers of these dutiable articles desire to establish a series of intermediate values if the stamp duty were correspondingly graduated; whether, in order to meet the convenience of the market, he will rearrange the incidence of the duty so that values of 1*s.* shall bear a stamp of 3*d.*, values of 1*s.* 4*d.* a stamp of 4*d.*, values of 1*s.* 8*d.* a stamp of 5*d.*, values of 2*s.* a stamp of 6*d.*, and so on, increasing the value of the article by 4*d.* and of the stamp by 1*d.* for each increment; whether such a readjustment, which would enable manufacturers to rearrange their charges without unduly increasing prices, could be made without loss of revenue; and, if so, whether he will propose an amendment of the Finance Bill to give effect to it?

Mr. Chamberlain replied: I am aware that the Select Committee on Patent Medicines which reported in 1914 (No. 414) was of opinion that the law governing the medicine stamp duty and the sale of medicines in general requires complete revision. Numerous proposals have been received for a regraduation of the duty on the lines suggested by the hon. member, but I do not think that any sufficient ground exists for dealing with the question of regraduation apart from the other matters, such as the repeal of a number of the existing exemptions, which were recommended by the Committee. As regards the question of the effect on the revenue of a permanent regraduation of the tax on the lines suggested by the hon. member, I doubt whether any reliable estimate could be formed under the present abnormal conditions affecting the cost of production.

Gazette.

Partnership Dissolved.

CRAGG, W., SHEPHERD, F. W., and CRAGG, H., 112, 212, and 214, Arkwright Street and 57 Mansfield Road, Nottingham, chemists, under the style of Cragg & Shepherd.

GIFTS TO SCIENCE.—Mr. Otto Beit has given 10,000*l.* to the Imperial College, South Kensington, to be used for building and equipment in such departments as most urgently need assistance of this kind; and an anonymous ex-student of the Royal College of Science has contributed 8,000*l.* to the Imperial College for the equipment of an intermediate scale laboratory in organic chemistry.

Insurance Act Dispensing.

A Record of matters concerning Chemists' interests in the National Health Insurance Acts.

Inquiry about a Panel Practitioner.

On June 6 a public inquiry was held, under Part VI. of the National Health Insurance (Medical Benefit) Regulations (England), 1913, at the head office of the Insurance Commissioners, Buckingham Gate, London, S.W., to hear evidence on the representation made by the Surrey Insurance Committee, that the continuance upon the panel of Dr. G. S. Candy, The Croft, Great Bookham, Surrey, is prejudicial to the interests of the panel patients. The Court of Inquiry consisted of Mr. Andrews Uthwatt, barrister-at-law, Dr. E. Collingwood Andrews, and Dr. H. B. Brackenbury. The Surrey Insurance Committee was represented by Mr. Bell (Clerk to the Committee); Mr. Hempson appeared for Dr. Candy. It was alleged that Dr. Candy had neglected to attend a patient, and his general attitude to patients was also complained of. For the defence, it was stated that Dr. Candy himself was ill at the time, and that he had made the best possible arrangements in the circumstances. The findings of the Court will be promulgated.

Reports from Local Centres.

ENGLAND.

Essex.—A meeting of the Pharmaceutical Committee was held on June 5, at which the reports of the Checking Bureau for the last portion of 1918 were adopted, a satisfactory state of accuracy being shown. Mr. Mallinson was appointed returning officer for the 1919-20 election. A complaint dealing with the hours of closing in a provincial town was dealt with, and a report will be brought up at the next meeting by the Secretary.

Nottingham.—At a meeting of the Pharmaceutical Committees (town and county), held on June 4, arrangements were made for the election of the Committees for 1919-20, and Mr. G. A. Mallinson was appointed returning officer. Considerable interest was shown in the pricing chart used by the Pricing Bureau. The Checking Bureau reports for November and December were also discussed.

Sheffield.—In the report of the Pharmaceutical Committee for the year 1918-19 it is stated with satisfaction that during the last four years chemists have been able to maintain the service without a single complaint against them. Compared with last year, there has been an increase of 38,549 scripts and an increase of 2,559%. 2s. upon last year's amount.

STATISTICAL DATA FOR 1918.

Total number of scripts	...	...	...	419,596
" " prescriptions	...	...	...	470,684
Average cost per prescription	...	...	...	6.26d.
" " dispensing fee	...	...	...	3.28d.
Sanatorium benefit prescriptions	...	...	(approx.)	4,000
Average cost...	...	...	...	9.91d.
" " dispensing fee	...	...	...	3.16d.
Percentage of error in pricing (as checked by Central Bureau)	...	...	...	0.16
Cost of checking prescriptions	...	...	...	48l. 18s.

SCOTLAND.

Coatbridge.—At a meeting of the Insurance Committee, held on June 6, the request of a chemist seeking admittance to the panel was granted. A note of the Pharmaceutical Committee's expenses for the year 1918, amounting to 5l. 8s. 6d., was passed for payment, subject to the approval of the Panel Committee and Insurance Commissioners.

Wills.

MR. WILLIAM BECKETT, Ph.C., 84 Windsor Road, Southport, who died on March 12, left estate valued at 8,362l. 11s. gross, with net personalty 8,300l. 16s. 10d.

MR. JOHN RICHARD LATEWARD, chemist and druggist, 743 Oldham Road, Newton Heath, Manchester, who died on March 30, left estate valued at 624l. 6s. 4d. gross, with net personalty 336l. 14s. Probate has been granted to Mr. Jas. Duffy, Moston; Mr. J. R. Lateward, New Moston, chemist, son; and Mr. Wm. Lateward, 743 Oldham Road, chemist, son.

Is Insurance Dispensing Profitable?

THE air is full of whining on account of the miserable remuneration obtained at present by "panel" pharmacists. However, as it behoves us to hold on, to continue agitating and hoping for better terms in the near future, perhaps a few suggestions which have occurred to me whilst engaged at Insurance dispensing may be beneficial.

Now that containers, labels, corks, paper, etc., are so expensive, and supplies so uncertain, we should endeavour to economise on every occasion. Labels should be merely slips bearing the usual printed directions, with spaces left to write in "tea," "table," or "dessert," and any extra instructions if required. The shop stamp (with address) may be conveniently used on large, plain labels when exceptional directions are given. Returned bottles with their corks, if well rinsed in a hot soda bath, and afterwards a weak solution of potass. permang., might be used again. Labels on refills, when fairly legible, if lightly sponged and pressed with blotting paper may be used again, saving time and labour when one is rushed. Wrapping is now almost a thing of the past, but old newspaper (not chemists' journals or price-lists, obviously), if cut into suitable sizes and strung up, would serve as wrappers.

To overcome the difficulty of interpreting the names on the faintly written duplicate order each medicament should be left standing on the script until called for, and then the address, which should invariably be filled in by the prescriber, would greatly assist in discriminating for which Mr. Jones, Brown, or Robinson the medicine was intended. Bottles—6, 8, 10, and 12 oz., also 1, 2, and 4 oz. willowettes already labelled—might, in many instances, be filled and the directions inscribed. Time is saved in washing funnels if folded paper cones, sealed and loosely plugged with tow, are kept at hand. Stock solutions, or emulsions of all substances which are most frequently in demand, should always be kept ready (unless very unstable) with the correct strengths clearly marked.

Sodii bicarb. is best kept in two-drachm and four-drachm packets, and quinin. sulph. (powdered) in packets of the quantities usually required. Bismuth. carb. with sod. bicarb. and pulv. rhei prescribed in draughts or mixtures needs no trituration; if mixed with a flexible spatula they may be added direct to the prescribed vehicle.

Viscid or semi-fluid substances such as glycerin or chlorodyn. (fuscum) might have a reserved graduated measure, or, better still, be kept conveniently diluted. The capacity of champagne or wine bottles, if handed in for emulsions or cod-liver oil, should be first determined, the bottle being then filled to proper height direct from the stock vessels, this preventing the soiling of the measures.

The assorting of the scripts before sending to the bureau is facilitated by stamping at time of dispensing, numbering and filing the duplicates (B forms), and placing in boxes (2 doz. plaster boxes are best) bearing the names of the principal prescribers, the odd ones being stored in a box marked "Miscellaneous." (H. C. M. 11/7.)

Business Changes.

MR. P. HOGLEY, chemist and druggist, has opened The Gynn Pharmacy, Northumberland Avenue, Blackpool.

MR. ROBERT SMALLEY, Ph.C., Padiham, Burnley, has taken over the business of Mr. J. E. Nicholson, chemist and druggist, Carnforth.

MR. R. E. GIBBINS, F.C.S., chemist and druggist, late of Coventry, has purchased the business of Mr. B. C. Browell, chemist and druggist, at High Street, Ashstead.

MR. D. T. EVANS, chemist and druggist, High Street, Margate, has reopened his branch at 12 Cliff Terrace, Cliftonville, which sustained damage during an air-raid last year.

SCIENCE AND WAR.—"There is one over-mastering lesson to be derived from the contemplation of all that science has done in the war. She has made mankind too formidable a being to be permitted to have recourse to it. The uncontrolled indulgence either on the part of a nation or of an individual in the exercise of the powers that science has placed within his reach is too directly fatal to civilisation itself."—Lord Moulton (in the Rede Lecture).

Association Affairs.

Chester.—At a meeting of pharmacists, held at Chester on June 4, the following resolution was passed:

This meeting of pharmacists strongly protests against the proposal of the Pharmaceutical Council to bring in a by-law admitting apothecaries' assistants to the Register of Chemists and Druggists without examination. Further, it suggests that the CHEMIST AND DRUGGIST should formulate some scheme whereby a referendum of the whole of the pharmacists on the Register might be taken.

This resolution was confirmed at a further meeting held at Stoke on June 5.

Dublin.—A Committee-meeting of the Dublin and Provincial Retail Drug Association was held on May 28, Mr. John Smith (President) in the chair. The following were also present: Dr. J. A. Walsh, Mr. R. White, Dr. J. A. Mitchell, Sir Thomas Robinson, Messrs. Victor E. Hanna, A. J. Barnes, A. Owen Wells, G. A. McLean Lee, Robert Mellon, and D. M. Watson. Price changes Nos. 74-206 were ordered to be circulated amongst the members, and various correspondence was dealt with. With reference to complaints received regarding the coding of prescriptions in Cork and district it was decided that the President should accompany Sir Thomas Robinson to Cork to interview members on the subject.

Edinb. urgh. The Edinburgh Chemists', Assistants', and Apprentices' Association proceeded on a botanical excursion on June 4. A large company gathered at Nether Liberton, and went by Braid Burn and Blackford Hill to Marchmont Road. The excursion was conducted by Mr. H. Stout, Ph.C. (President of the Association), and some excellent field work was done. Among plants collected were the following: *Cytisus scoparius*, *Prunus laurocerasus*, *Conium maculatum*, *Sambucus nigra*, *Salix amygdalina*, *Digitalis purpurea*.

Essex.—A meeting of the County of Essex Association of Pharmacists was held on June 5, when the delegates to the Local Associations Executive Conference presented their report. The appointment of Treasurer was held over until the next meeting. The financial statement of the L.A.E. was discussed and accepted. It was decided to nominate and support at the proper time Mr. C. Goode as a candidate for the L.A.E. in the East Anglian section. Information was given as to the method of dealing with each resolution passed by the Conference. Proprietary Articles Trade Association matters were also considered.

Great Yarmouth.—The monthly meeting of the Great Yarmouth Pharmaceutical Association was held on June 4, Mr. P. R. Hill (President) in the chair. It was decided to write Sir A. Fell, M.P., with reference to the suggested alteration in the medicine-stamp duty. The annual outing was fixed for July 3 to Whitlingham, Cantley, and Brundall. After discussion, it was decided to close on Thursdays from 1.30 to 6 P.M. during the coming season. The question of charges for developing and printing photographs was also considered, and a schedule of prices agreed to.

Huddersfield.—Mr. V. Shaw presided at the monthly meeting of the Huddersfield Chemists' Association on June 5, when it was decided to apply to the Insurance Committee for a grant towards administration expenses. The suggested formation of an Industrial Council was discussed, and a report from the Central Checking Bureau was considered satisfactory. It was decided to close the chemists' shops at noon instead of at 1 P.M. on July 9, on the occasion of the Association's annual excursion, when Bolton Abbey will be visited.

Scottish Pharmaceutical Federation.—The following circular letter has been sent to Scottish chemists by Mr. Jas. Jack (Chairman) and Mr. Alex. Murray (Secretary), of the Scottish Pharmaceutical Federation:

We regret, as loyal members of the Pharmaceutical Society, that in a circular letter to Scottish pharmacists, dated May 29, 1919, issued by the Resident Secretary of the Pharmaceutical Society in Scotland, erroneous impressions are conveyed as to the origin, aims, and objects of the Scottish Pharmaceutical Federation. It is there stated: "An honourable agreement was arrived at, at the meeting of the Executive, that no further steps would be taken regarding local organisation in Scotland in its bearing upon the setting up of the Scottish District Drug Trade Industrial Council until the Secretary of the Society, Sir William Glyn-Jones, had an opportunity of explaining fully the whole situation and conferring with all parties interested." It is difficult to understand how an "honourable agreement" could be "arrived at" at a private meeting of the North British Executive, to which no official representation

of the Federation had been invited. But the principal matter which we think we have just reason to complain of is that the whole trend of the letter seems designed to convey the impression

First, that we, as a body, have created an organisation antagonistic in some way to the interests of the Pharmaceutical Society;

Second, that we wish members of the craft to join the Federation without having had the opportunity of hearing from Sir William Glyn-Jones a complete explanation of the Society's own scheme of local organisation in Scotland. We, on the contrary, are most earnestly desirous that at no point shall the work of the Federation touch upon, or interfere with, the legitimate functions of the Society within its own proper and well-defined sphere; and as organisation of our craft under *some* scheme is now made imperative by the Government and is required to be carried out *without delay*, we offer a scheme which we believe to be much more suitable to the peculiar needs and aspirations of Scottish pharmacists. The following may be stated as the reasons which have led us to adopt this policy: *First*, an organisation for purely trade purposes is admittedly overdue. *Second*, an unique opportunity has now been afforded which we are convinced should be taken advantage of. *Third*, had the Local Associations Executive scheme, which has been operating in England for some years, been regarded as suitable to the needs of the Scottish pharmacists, no Scottish Federation scheme would have been necessary to-day. *Fourth*, the Federation offers a scheme whereby the employers' section of the Industrial Council to be set up will have *equal power and status* with that of the employees' section of that Council.

The Federation Committee, in view of the extreme urgency of this matter, would take it as a favour if you would forward to the Secretary the enclosed application for membership, duly signed, by return of post.

Sheffield.—The annual general meeting of the Sheffield Pharmaceutical and Chemical Society was held on June 4, when Mr. A. H. Culverhouse presided. Messrs. H. B. Hammond and A. R. Powell were elected scrutineers of the voting papers. The appointment of Mr. Culverhouse to the local Council in connection with venereal diseases was submitted to the Executive Committee. Mr. Appleton moved a vote of thanks to the retiring officials for their services during the year, which has been a successful one. Papers have been given by Sir William Glyn-Jones, Councillors Deakin, Sargeant, and Skinner, Mr. Antcliffe, and Mr. Woolley (Editor of THE CHEMIST AND DRUGGIST). The balance-sheet showed a reduced balance of 10l. 12s. 6d., brought about by the expenses of the jubilee dinner. Miss L. Antcliffe was elected a member of the Society, and was congratulated on being the first lady associate to be elected to membership. In response to the President, the Treasurer (Mr. H. Antcliffe) gave the meeting a short outline of the position which led to the framing of the new by-law. He also indicated the proceedings necessary for demobilised students to take in order to avail themselves of the Government grant. It was decided that the Society be exhorted to make a by-law whereby members of the Society may vote by means of a card-vote. It was resolved also that the Sheffield Pharmaceutical and Chemical Society strenuously oppose the passing of the proposed new by-law which admits unqualified persons to the Register of Chemists and Druggists. The result of the poll showed that Messrs. G. R. Airey, H. Antcliffe, J. Austen, A. H. Culverhouse, A. Knowles, and E. Preston had been elected to the new Council.

Festivities.

Cambridge Juniors' Outing.

The Cambridge Junior Pharmaceutical Association had a cycle-run to Willingham on May 29. After tea, the members proceeded to Mr. W. Spencer Turner, Ph.C., who gave a demonstration on several botanical specimens, among which were *Atropa Belladonna*, *Rhamnus catharticus*, *Valeriana officinale*, *Hyoscyamus niger*, *Bryonia*, *Aconitum Napellus*.

Harrogate Social Evening.

The members of the Harrogate Pharmaceutical Association held a successful social evening on June 5 at the Café Imperial, Harrogate. Supper was followed by an impromptu concert, in which Mr. Chipperfield, Mr. and Mrs. Lambert Foster, and Mr. and Mrs. A. Mortimer took part. During an interval Mr. Illingworth (President), on behalf of the Association, presented to Mr. Mortimer a solid silver cake-dish, with vases to match, and to Mrs. Mortimer a gift of books.

The Pyrophoric-alloy Industry.

ALREADY before the war the use of lighters as a substitute for matches had steadily been gaining ground, particularly on the Continent, not only on account of their handiness, but also for reasons of economy, in view of the fact that in many countries the sale of matches was a Government monopoly. Indeed, their use had become so widespread as to induce some Governments to impose a special tax on lighters. The manufacture of the pyrophoric alloy used in lighters marks a further development in the industry of the rare earths, which dates from 1885, when an Austrian, Baron Auer von Welsbach, while investigating certain ores, observed the brilliant light-emitting qualities of their oxides, an observation which led to the invention of the incandescent-gas mantle. The first mantles proved somewhat of a disappointment, but further researches showed that while thoria should be the main constituent of a mantle, the presence of 1 or 2 per cent. of other oxides, chiefly cerium oxide, was essential to produce a brilliant light. The manufacture of incandescent-gas mantles led eventually to the making of by-products from which pyrophoric alloy is now produced.

The original sources of thoria found in Norway proving insufficient to supply the demand for the manufacture of incandescent-gas mantles, monazite sand, which is found rather plentifully in Brazil, India, and to some degree in North Carolina, was turned to account. Monazite sand contains 20 to 30 per cent. of cerium oxide, 20 to 30 per cent. of oxides of lanthanum and didymium in varying proportions, small percentages of yttrium and zirconium oxides, and about 15 to 30 per cent. of phosphoric acid. Only the 2 to 10, generally 6 per cent., of thorium oxide present in monazite sand is of use for the manufacture of incandescent-gas mantles, and the remaining by-product, called "cerium oxides" or "mixed rare earth metals," constitutes the raw material now utilised for making pyrophoric alloy. This by-product is a mixture of cerium, lanthanum, didymium, samarium, etc., all very closely allied and very similar metals. As regards the development of the pyrophoric-alloy industry, it may be mentioned that this was centralised by Baron Auer von Welsbach in the Freibacher Chemische Gesellschaft, of Freibach, in Austria, and branches established in Great Britain, France, Russia, the United States, etc. The German and Austrian rare earth gas-mantle trust turned over a large part of their cerium residues to the Freibacher Chemische Gesellschaft, which made them into metallic cerium; this the company exported to its branches in Great Britain, France, United States, etc., which alloyed the metallic cerium with about 30 per cent. of iron and other metals, to meet local requirements, made it into small pieces and sold these to the manufacturers of lighters, etc. This business was protected by patents. After the outbreak of the war the Austrian company was unable to supply cerium metal to its branch in the United States; an attempt to import it by the submarine *Deutschland* was unsuccessful. After intensive research work, Alcan Hirsch and Marx Hirsch patented, July 23, 1918 (U.S. patent 1,273,223), a process for making metallic cerium, which the New Process Metals Co. had manufactured and sold to the American branch of the Freibacher Chemische Gesellschaft (since April 1917 known as the American Pyrophor Co.) until December 1917, when the latter was taken over by the Alien Property Custodian of the United States, after the declaration of war against Austria.

The process in question, as outlined in the "Journal of Industrial and Engineering Chemistry," October 1918, is based on the utilisation of the oxides forming the by-products from the manufacture of incandescent-gas mantles; and here it may be mentioned that about a quarter of a million pounds of thorium oxide is made annually in the United States from five million pounds of monazite sand, resulting in more than a million pounds of by-product, which constitutes the raw material for making pyrophoric alloy.

These oxides are dissolved in commercial hydrochloric acid, reasonably free from sulphuric acid and sulphates, using as little heat as possible. The resulting solution consists of a mixture of the chlorides of cerium, lanthanum, didymium, samarium, yttrium, thorium, and other rare earth metals, of which cerium is the principal single constituent. The amounts of sulphur and phosphorus compounds on the one hand, and of divalent chlorine carriers, such as iron and aluminium compounds, on the other hand, should not exceed 3 per cent. for each. The addition of an excess of cerium oxide may be made to throw out the iron and aluminium, and calcium chloride, or preferably

barium chloride, may be added to throw out the sulphur and phosphorus compounds. The solution is now filtered hot, or clarified by settling, and evaporated to dryness. The oxy-chlorides now have to be removed, and this is effected by one of the following methods: (1) The chloride solution is evaporated to dryness and then fused in an atmosphere of hydrochloric-acid gas to produce complete dehydration, while preventing oxidation by the air; (2) about 15 per cent. of sodium or potassium chloride and 15 per cent. of ammonium chloride—the amount employed is based on the dry weight of the dissolved rare earth chlorides—are added to the solution of chlorides after the excess of aluminium, iron, sulphur, and phosphorus impurities has been removed, whereupon the solution is evaporated to dryness. In the above treatment the ammonium chloride is volatilised and forms a chlorinating agent, as does the hydrochloric acid in the method first described.

The electrolysis is carried out in pots of cast iron, and only the bottom of the pot is heated. Electrolysis is begun with a nearly empty pot; a small amount of the electrolyte is heated nearly to fusion, and then the electric current is applied to complete the fusion; electrolysis is continued, with the gradual addition of electrolyte, until the pot is practically full. Electrolysis lasts about twenty-four to twenty-six hours; prior to its termination the heating torch is turned on full blast, the current is increased, and the charge in the pot is stirred up thoroughly about every half-hour during the last two or three hours. The contents of the pot should be in a nice liquid condition if the electrolysis has been properly carried out. The current is now shut off, the anode taken out, and the contents are gently but thoroughly stirred for about five minutes, care being taken to cease stirring well before the contents begin to stiffen.

The mixed metal thus obtained is relatively pure, but is soft and does not spark easily on scratching. Consequently, to make pyrophoric alloy it must be made harder; therefore it is alloyed with about 30 per cent. of other metals, chiefly iron. This alloy forms the commercial product used for lighters, and is placed on the market in the form of small strips, rectangular or round, of varying lengths, of which there are from 200 to 2,000 to the pound. The most general form is a round piece about $\frac{1}{8}$ in. in diameter and $\frac{1}{2}$ in. long, of which there are from 1,500 to 2,000 pieces to the pound. It may be mentioned that the manufacture of these small pieces, the only form in which pyrophoric alloy is saleable, is a most difficult operation.

Prevention of Smut in Cereals.

LEAFLET No. 323, issued gratis by the Board of Agriculture and Fisheries, 3 St. James's Square, London, S.W. 1, gives the following particulars as to the methods of treating smut in barley and oats:

"Covered smut" of barley and "loose smut" of oats, which are propagated by lurking spores, can be controlled easily by the use of a steep which will kill the spores without causing injury to the grains. For this purpose the most satisfactory steep is one made of formalin. The blue vitriol or copper sulphate steep, used to prevent the attacks of bunt in wheat, can be used, but it is not so satisfactory, as it is apt to kill a rather large percentage of the grain. All that is necessary to make a formalin steep is to pour one pint of commercial formalin into 20 gals. of water and mix it thoroughly. This strength, corresponding to one part of formalin in 160 of water, should not be exceeded, for a stronger solution is not required for killing the spores and may injure the grain. In fact, if economy with formalin is necessary, a still more dilute solution, made up of one pint to 30 gals.—that is, one part in 240 of water—will prove effective. The seed-grain should be soaked in this solution for ten minutes, stirring it meanwhile in order to be certain that every grain is thoroughly wetted. Then it should be placed in a heap for four hours or so, when it will be ready for drilling. If not required for this purpose immediately it should be dried off in thin layers on a clean barn floor. It is better, however, to sow as soon as possible after dressing. An alternative method is to place the grain in a heap on a floor and pour the dilute solution on it at the rate of 1 gal. for every four bushels. The heap must be turned repeatedly in order to moisten every grain.

STEPS HAVE BEEN TAKEN, says a British *communiqué* issued in Paris, to prevent the Germans from prejudicing the intentions of the Peace Treaty by the export in unduly large quantities of dyes and drugs to neutral countries.

Foreign Trade of India.

THE annual tables relating to the trade of British India with the British Empire and foreign countries for the period 1912-13 to 1916-17 have just been issued by the India Office [Cmd. 48, 1s. 9d.]. The values throughout the tables are given in pounds sterling at the rate of 15 rupees to 1l.; they show that the total imports into India during the year 1916-17 were valued at 132,458,923l., against 100,077,027l. in 1915-16. Of this total in 1916-17, 106,823,810l. consisted of merchandise alone, compared with 92,112,868l. in 1915-16. The exports in 1916-17 amounted to 298,768,488l., compared with 238,547,812l. in 1915-16; of this amount, 160,591,156l. consisted of private merchandise, compared with 131,586,813l. in 1915-16. A summary of the values of imports of merchandise consigned from the British Empire gives the following figures for the past four years:

	1913-14	1914-15	1915-16	1916-17
Spices	1,123,406	1,123,599	1,214,982	1,272,508
Gums, resins, and lac... ..	100,755	58,615	84,349	148,648
Chemicals, drugs, and medicines	1,071,274	1,047,972	1,359,852	1,561,136
Dyes and colours	552,779	546,140	636,237	1,019,756

Exports of Indian produce and manufactures in 1916-17 amounted to 155,435,721l., compared with 128,356,191l. in 1915-16, or about 27 millions more. They were absorbed chiefly as follows:

	1915-16	1916-17
United Kingdom	48,788,054	52,274,633
British Possessions	21,956,462	25,698,501
France	6,270,422	9,487,197
Italy	5,952,230	6,435,568
Russia	3,622,717	3,781,372
Japan	12,271,055	17,578,901
United States	14,098,170	20,757,433
Argentina... ..	2,079,634	1,712,172

Some of the leading imports of chemicals, drugs, etc., into India during the past four years were as follows:

IMPORTS.

	1913-14	1914-15	1915-16	1916-17
Chemicals and chemical preps. (excluding chem. manufactures and medicines):				
Acids:				
Nitric ... Cwt.	4,868	3,289	917	2,836
Sulphuric acid	63,938	24,621	5,133	1,648
Othersorts, ..	9,629	7,600	6,817	8,329
Aluminous sulphates (including alum)	90,079	73,141	92,731	114,082
Ammonia and salts	13,340	11,612	13,574	13,446
Arsenic and its oxides ..	2,940	2,073	2,096	2,391
Bleaching materials ..	75,628	73,945	75,925	109,465
Carbide of calcium ..	19,998	17,477	22,353	17,763
Copperas... ..	14,490	15,007	50,668	102,089
Disinfectants, ..	25,395	25,082	26,876	29,582
Potassium comp.: Cyanide of potash ..	5,279	4,148	993	1,085
Saltpetre ..	548	171	222	140
Othersorts, ..	8,733	4,385	5,923	2,999
Soda comp.: Bicarbonate of soda ..	86,413	108,647	120,253	109,433
Borax (also boric acid) ..	5,255	6,301	8,275	7,225
Caustic soda... ..	98,197	118,099	87,901	57,091
Sodium carb.(soda ash and soda crystals) ..	423,140	452,552	552,782	367,529
Other sorts, ..	49,957	44,091	54,490	74,306
Sulphur	126,541	122,031	169,555	179,324
Other sorts of chemicals ..	171,186	172,119	274,285	300,276
Drugs and medicines:				
Aloes ...cwt.	1,632	1,067	23	417
Asafetida	5,817	3,027	3,260	6,277
Camphor ... lb.	1,363,237	1,627,788	2,080,889	2,007,026
Cassia lignea cwt.	46,470	40,900	55,507	28,275

	1913-14	1914-15	1915-16	1916-17
Drugs, etc.—cont.				
Cinchona... lb.	—	—	1,543	729
Cocaine, hyd. oz.	1,456	1,076	901	548
Proprietary medicines £	176,021	129,289	137,530	153,300
Quinine and alkaloids including cinchona ... lb.	117,088	89,034	—	—
Quinine salts: Quinine sulphate or bisulphate lb.	—	—	75,472	32,539
Quinine hydrochlor. or dihydrochlor. lb.	—	—	4,335	4,679
Other q. salts, ..	—	—	15,526	10,572
Sarsaparilla and preps. ... lb.	2,556	1,945	4,063	1,844
Storax	78,430	90,321	106,238	1,554
Other drugs and medicines £	301,738	267,691	330,220	414,643
Dyeing and tanning substances: Cochineal cwt.	1,665	1,356	2,186	1,367
Cutch and gambier ..	43,296	32,728	36,585	33,701
Dyes from coal tar: Alizarine dyes lb.	6,469,739	3,757,123	162,397	330,200
Aniline dyes ..	9,703,122	4,160,166	552,732	731,643
Others	73,034	44,718	1,238	12,698
Indigo, synthetic cwt.	6,051	3,167	162	57
Saffron ... lb.	59,314	45,321	50,591	69,922
Other sorts (including lac dye) ..	26,945	39,296	63,983	102,420
Gums and resins: Acacia ...cwt.	8,025	4,113	9,624	6,529
Benzoin	14,180	13,432	13,356	15,407
Olibanum	38,287	20,181	27,291	40,155
Resin	44,788	24,323	30,765	18,358
Other sorts ..	34,258	9,977	31,699	14,254
Optical instruments ... £	46,912	25,905	18,797	34,252
Surgical instruments ... £	81,105	63,275	53,993	81,937
Lac: Stick and seed cwt.	13,318	977	2,112	20,804
Shell and button	11	4	365	61
Other kinds (excluding lac-dye)	128	230	788	230
Spirit present in drugs, med. or chemicals gal.	128,863	102,149	102,674	103,205
Spirit, perfumed, ..	21,918	13,568	12,081	16,564
laid methy- ..	276,614	319,308	256,866	232,637
Quicksilver ... lb.	205,729	94,154	194,755	115,744
Oils: essential gal.	14,737	16,440	17,641	19,204
Oils: vegetable, non-essential: Castor ... gal.	320	13,602	50,783	1,625
Coconut	30,353	38,116	12,633	81,219
Cottonseed	2,138	632	549	—
Groundnut	11,504	11,187	9,312	11,751
Linseed	439,482	360,484	267,687	134,922
Mustard	709	278	582	2,757
Sesame	795	561	433	270
Other sorts ..	66,848	52,424	44,633	42,357
Opium ... lb.	425	260	201	28,491
Paints and painters' materials £	548,869	503,051	541,116	765,346
Perfumery (not being perfumed spirits) ... £	33,471	22,252	22,374	21,531
Soap, household cwt.	301,369	352,974	315,287	326,518
Toilet soap ..	45,339	39,319	46,261	47,246
Other sorts ..	16,152	12,192	12,703	6,397
Spices:				
Belelnuts ... lb.	127,464,241	140,298,125	131,111,854	128,277,848
Cardamoms	62,800	178,762	149,639	206,029
Cassia	31,984	38,189	102,082	40,063
Chillies	17,253	62,232	81,396	39,711
Cinnamon	182	311	228	15,943
Cloves	9,049,873	8,140,059	10,701,691	10,956,377
Ginger	2,499,313	2,158,414	3,297,328	1,757,306
Nutmegs	1,213,989	1,297,016	1,333,495	976,618
Pepper	2,107,147	1,197,763	4,322,765	4,614,162
Other sorts ..	331,319	309,638	469,070	276,729
Starch and farina cwt.	101,967	76,108	101,611	123,027
Toilet requisites (not specified elsewhere)... £	146,882	107,627	126,158	156,054
Waxes, other than paraffin wax cwt.	4,599	3,625	4,109	6,062

Practically all the ammonia and salts, potassium compounds, sodium compounds, and borax were supplied by the United Kingdom, but Japan had the lion's share of the trade in sulphuric acid (1,570 cwt.), in aluminous sulphates (64,640 cwt.), in copperas (62,831 cwt.), and in sulphur (82,742 cwt.). Japan was also an active competitor in bleaching materials, 52,933 cwt. being obtained from that country, compared with 56,526 cwt. from the United Kingdom. Proprietary medicines were obtained from the United Kingdom to the value of 113,794*l.* out of a total of 153,300*l.*, the contribution from the United States being 20,486*l.* Unenumerated drugs and medicines valued at 310,559*l.* were shipped from the United Kingdom out of a total of 414,643*l.*, Japan sending 31,503*l.* and the United States 23,614*l.* Of quinine sulphate the United Kingdom supplied 47,306 lb. and Java 15,583 lb., while quinine hydrochloride to the extent of 9,922 lb. and other quinine salts to the extent of 15,996 lb. were also shipped from the United Kingdom.

EXPORTS.

	1913-14	1914-15	1915-16	1916-17
Chemicals and chemical preparations <i>£</i>	219,049	300,327	492,149	745,724
Drugs and medicines:				
Aloes ... cwt.	62	117	109	270
Asafetida ... "	52	42	35	67
Asafetida (re-exports) ... "	1,211	723	635	1,158
Camphor ... lb.	50	110	128	124
Cinchona ... "	605,102	642,987	607,987	688,543
Galangal ... cwt.	1,088	301	612	947
Nux vomica ... "	46,149	33,161	59,225	56,148
Senna ... "	26,450	15,288	34,280	103,319
Other drugs and medicines <i>£</i>	138,093	97,732	155,448	349,077
Dyeing and tanning substances:				
Cutch and gambier ... cwt.	58,859	62,041	145,511	60,286
Indigo ... "	10,939	17,142	41,932	33,539
Myrabolans ... "	1,236,394	1,164,261	1,392,663	1,081,209
Safflower ... "	3,983	2,867	3,552	4,124
Turmeric ... "	115,027	64,148	67,605	101,978
Other sorts ... "	42,117	25,000	28,891	15,116
Gums and resins:				
Acacia ... "	44,691	20,753	12,400	18,651
Benzoin ... "	238	181	178	172
Olibanum ... "	778	62	—	741
Resin ... "	77	23	43	1,492
Other sorts ... "	1,289	8,137	11,229	17,776
Lac:				
Button ... "	21,865	25,526	12,610	3,109
Seed ... "	17,097	12,300	24,692	28,267
Shell ... "	275,357	307,845	358,661	324,284
Stick ... "	1,196	1,129	3,519	7,459
Other kinds (except lac dye) ... "	23,646	19,892	17,838	18,230
Oils: essential:				
Lemongrass gal.	47,522	27,796	31,700	34,993
Other sorts ... "	24,618	9,958	24,470	23,112
Oils, vegetable:				
Castor ... "	1,007,001	898,269	1,451,655	1,723,469
Coconut ... "	1,091,477	1,824,539	2,044,894	2,051,033
Cottonseed ... "	2,507	12,471	43,030	84,018
Groundnut ... "	288,190	223,363	372,538	982,253
Linseed ... "	102,360	132,796	280,850	178,257
Mustard ... "	407,178	413,189	465,735	574,328
Sesame ... "	208,053	188,553	141,301	219,834
Other sorts ... "	135,321	91,530	57,469	58,725
Opium (chests)	11,906	10,856	8,786	8,710
Paraffin wax cwt.	16,858	15,912	12,878	12,760
Perfumery (not being perfumed spirits) <i>£</i>	303,153	373,010	373,589	454,867
Seeds, essential:				
Ajama ... cwt.	4,507	2,609	3,743	2,356
Ajowan ... "	9,784	7,368	13,062	11,093
Anise ... "	1,129	835	591	3,030
Assalia ... "	505	170	285	252
Caraway ... "	—	—	46	15
Coriander ... "	95,533	84,058	90,104	84,885
Cumin (other than black) ... "	19,026	13,554	26,308	28,992
Cumin, black ... "	1,313	1,411	2,050	2,024
Fennel ... "	15,256	4,223	4,743	6,823
Fenugreek ... "	12,760	18,300	10,908	8,408
Sava or dill ... "	2,090	1,945	3,380	9,382
Othersorts ... "	147	39	50	95
Seeds, non-essential: cwt.				
Castor ... "	2,697,754	1,656,294	1,758,963	1,848,947
Copra ... "	763,832	636,911	313,558	531,123
Cotton ... "	5,686,533	4,155,778	1,913,273	792,608
Groundnut ... "	5,558,140	2,766,448	3,508,860	2,875,883
Linseed ... "	8,277,467	6,431,535	3,859,747	7,882,060

	1913-14	1914-15	1915-16	1916-17
Seeds, non-essential—cont.				
Mowra ... cwt.	665,979	148,742	84,317	84,795
Mustard ... "	102,085	51,058	63,554	121,482
Niger ... "	82,146	46,603	11,783	33,597
Poppy ... "	379,619	139,843	137,433	110,489
Rape ... "	4,980,100	1,938,234	1,904,280	2,434,975
Sesame ... "	2,244,019	934,102	275,520	1,673,317
Tea ... "	7,847	4,384	2,755	2,757
Other sorts ... "	10,317	24,622	5,617	5,034
Spices: lb.				
Betelnuts ... "	439,886	482,160	329,214	398,574
Cardamoms ... "	373,401	413,135	482,764	294,934
Cassia lig. (re-exports) ... cwt.	7,431	3,472	6,881	6,714
Chillies ... lb.	16,103,085	16,013,482	15,289,078	15,824,851
Cinnamon ... "	38,170	39,711	54,147	66,045
Cloves ... "	9,186	13,969	21,371	7,936
Ginger ... "	9,214,471	7,529,188	6,289,699	5,976,353
Nutmegs ... "	955	612	992	35,368
Pepper ... "	13,879,964	15,985,054	15,225,029	13,920,443
Other sorts ... "	177,884	140,514	64,044	107,351

The bulk of the saltpetre exported (525,396 cwt.) was shipped to this country, borax and alum being the only other chemicals exported, the figures respectively being 7,309 cwt. and 1,290 cwt. Out of a total of 101,857*l.* unenumerated crude drugs shipped, the United States acquired 52,045*l.* worth, while that country also purchased 28,057 cwt. of nux vomica, against 26,886 cwt. for the United Kingdom. The turmeric figures show an extraordinary increase—101,978 cwt. in 1916-17, against 67,605 cwt. in 1915-16, of which this country received 34,823 cwt. The shipments of shellac to the United Kingdom show a remarkable falling off, only 46,786 cwt. being shipped, against 81,174 cwt. in 1915-16, whereas the United States received 239,521 cwt., against 232,023 cwt. Among the seeds, France had the bulk of the trade in copra, sesame, and groundnuts, while the United Kingdom was pre-eminent in castor, linseed, and rape. The United States imported 421,339 cwt. of castor-seed and the United Kingdom 780,154 cwt., France and Italy absorbing 331,046 cwt. and 211,702 cwt. respectively.

Maw's "Victory Day."

ON June 7 the staff of S. Maw, Son & Sons, Ltd., spent an eventful day on the new sports ground of the company at Blackheath. All were "badged" by coloured buttons indicative of years of service. The badges were a silent tribute to the happy relationship existing between directors and staff. The sports ground was officially opened by the directors. Dr. Henry T. Maw and Mr. Mowbray T. Maw batted in the opening cricket-match, and Mr. A. F. Porter (managing director) bowled the first over. Among the items in the day's programme were an 880 yards flat handicap, a relay race, a tug-of-war, a sack race, a three-legged race, special competitions for ladies, and—last but not least—Maw's "Victory Derby," with a Tottenham Corner all complete. Tea was served in the refreshment marquee, and a distribution of prizes followed. Dr. Henry T. Maw, in the course of an appropriate speech, mentioned that ground had been secured adjoining Hadley Woods where he hoped that by next year ideal playing-fields would be laid out. Mr. Mowbray T. Maw added a few reminiscences, and Mr. A. F. Porter assured the older members of the staff that bowls were to be provided, adding that 7 employes had over 50 years each to their credit, 21 had 40-50 years, 26 had 30-40 years, 42 had 20-30 years, 51 had 10-20 years, and 22 had 5-10 years. The distribution of prizes, at which Mrs. H. T. Maw and Mrs. A. F. Porter presided, followed. (Mrs. Mowbray T. Maw was absent by doctor's orders). The Lambeth Guardians' School Band played selections throughout the day; and the "Victory Sports" concluded with a concert and an *al fresco* dance. A vote of thanks was accorded to the M.C., Mr. E. G. Baxter.

MEDICAL METAPHORS.—"It [the League of Nations] has been sanatonized by the Teuton, and also the promise of a crutch that can be used as a club."—*H. de Vere Stacpoole in the "Morning Post."*

The Quinine Contract.

ON several occasions we have referred to the new quinine contract (*C. & D.*, January 26, August 17, August 31, 1918), and from news we have now received from Java we are able to furnish particulars of the negotiations that preceded its conclusion. During the war a new factor had arisen, as the growers of bark desired to retain the right not only of shipping bark but also quinine sulphate. This was the result of a method elaborated by Van Leersum, whereby it was possible to produce crude sulphate of quinine from the fresh bark on the plantations. Further, the Bandoeng Quinine Factory dropped its opposition to accepting crude quinine, and the other manufacturers decided to follow suit. Their opposition had been based on the assumption that their plant could not deal with crude quinine sulphate as supplied by the growers, but tests had been made and it was found practicable, and when the news was received from Holland that there was no objection to the supply of crude quinine by the planters to the Bandoeng Quinine Factory the new contract was assured. The advantages of the new method were apparent, especially under existing circumstances. One bale of bark takes up a space of one-fifth cubic metre, whereas 6 kilos. of quinine sulphate (the amount obtained from one bale) only occupies a space of six cubic decimetres. Further, the cost of production is reduced, as there is no necessity for drying the bark, pressing it, and packing it in bales, thus effecting a saving of two florins on every kilogram of quinine. The cost for freight is enormously reduced not only to Europe, but from the plantation to the port of shipping to Europe. The method of producing crude quinine on the plantation was easily worked, and it would permit shipping in one case what would otherwise be thirty-five cases of bark. Consequently the whole production of two and a half years' harvest could be accommodated in a small warehouse, instead of requiring several ships for its transport, an important item in view of the shortage of tonnage. The only persons who objected to this innovation were the importers and the packers. At a meeting held at Bandoeng on April 3, 1918, 150,000 kilos. of quinine sulphate were represented, while the board of directors in Holland represented a further amount of 250,000 kilos., and 40,000 kilos. were not represented; this will give some idea of the importance of this drug.

Prior to the conclusion of the new contract a new factor was introduced by Japan appearing as a participant. Whereas the old contract included all planters, in future (so it was stated in the "*Algemeen Landbouweekblad voor Nederlandsch-Indië*," June 14, 1918) there would be three distinct groups: (1) a group of Dutch planters who would contract with Dutch factories; (2) a group of British planters contracting with British factories; (3) a group of Dutch producers contracting with Japanese manufacturers. The negotiations with the Japanese buyers finally led to an agreement whereby 10 cents per unit was paid, delivered at the harbour of Priok; and in the same article it was stated that the amount of bark earmarked for Japan amounted to 10 per cent. of the entire production, whereas it had been "authoritatively" stated that it was "of no importance." The appearance of Japan on the market apparently frightened some of the interested parties, and an article appeared to minimise this effect. It was pointed out that Japan had two courses open to participate in the new contract: either to seek inclusion as a manufacturer—a course doomed to failure, as the existing factories would scarcely feel disposed to allow an inexperienced newcomer to join their ring—or by concluding separate arrangements with certain planters to break the existing ring and prevent the conclusion of a new contract, as hitherto the European manufacturers had insisted on receiving the whole of the Javanese production. Japan chose the latter course to obtain a portion of the bark, and a writer points out that the advent of Japan as a buyer should be welcomed, as it is better able to increase the sale of quinine in Japan, China, and Korea than the European manufacturers, thus obviating the danger of over-production.

The same journal publishes in its pages of November 15, 1918, a *résumé* of the provisions of the new contract, which runs till December 31, 1924. The new contract has been concluded between the cinchona planters in the Dutch Indies—with a few exceptions—exclusively with the Dutch quinine factories—i.e., the Amsterdam Quinine Factory, the Bandoeng Quinine Factory, and the Netherlands Quinine Factory in Maarsse. Both parties are represented on the Quinine Bureau established in Amsterdam, consisting of three representatives each of the planters and of the manufacturers, who together elect a neutral chairman. Its duties

are not only administrative, but also commercial, as it establishes the prices for quinine. Of the net prices fixed for quinine the planters receive three-fifths for the first twenty florins and half of the excess, the manufacturers receiving the remainder. The purchase price is paid by the manufacturers on each delivery in Holland, on the basis of 6 cents per unit (the unit is 1 per cent. quinine sulphate or 500 grams of bark), while the surplus profits are retained by the Quinine Bureau, to be distributed later among those entitled to participate. The manufacturers are bound to accept during the first year of the contract, from July 15, 1918, to December 31, 1919, 751,000 kilos. of quinine sulphate in the shape of bark, and in each succeeding calendar year 515,000 kilos. There are to be ten deliveries annually, either in Holland or in Java. Pharmaceutical barks are excluded under this arrangement, except that they may only be sold in Amsterdam or Java at prices averaging 50 to 85 per cent. higher (per quinine sulphate unit) than those for manufacturing bark. Among the 200 paragraphs of the contract rules have been laid down regulating the reductions in prices to be granted on supplying bark in Java to the Bandoeng Quinine Factory, or to other friendly purchasers, and also with regard to the right of planters to ship crude quinine sulphate in the place of bark. There are also numerous special provisions regarding exceptions during the war and in the transition period.

Import and Export Relaxations

Import Restrictions.

THE restrictions on the importation of fine balances, safety-razor blades, and cash registers have been removed. The importation of steel barrels or drums for containing oil or chemicals, perfumery and toilet preparations, and batteries for pocket lamps, is to be licensed only exceptionally as and when required. The present ration for the following painters' colours and pigments (50 per cent. of 1916 imports) is to be maintained: Brilliant, bronze blue, chrome green and yellow, chromate of lead, copper oxide, minium, oxide of tin, steel blue, Parisian blue, powder colours, red lead, vermilion.

Exports to Norway.

The Board of Trade (Export Licence Department) announce that except for goods on lists "A" and "B" all restrictions on export to Norway, whether by freight or by parcel post, have been removed. It is no longer necessary to consign any goods to importing associations or official consignees, nor to forward shipping bills or specifications to the Export Licence Department for approval. Licences for goods on lists "A" and "B" will be issued where home supplies permit. Exporters should, however, satisfy themselves that the goods are not subject to any Norwegian import prohibition.

Headings Transferred from One List to Another.

From "A" to "C" list: copper sulphate. From "B" to "C" list: malt sugar (maltose) and articles and preparations containing malt sugar; pitch, coal tar.

Headings Altered.

Delete	Substitute
(A) Cinchona bark, its alkaloids and their salts, and preparations of any of these substances.	(A) Quinine sulphate. (C) Cinchona bark, its alkaloids and salts, and preparations of any of these substances, except quinine sulphate.

Exports without Licence.

As a result of the removal from list "A" of preparations containing quinine, except quinine sulphate, the heading on the free list of exports relating to patent and proprietary medicines has been amended to read as follows:

"Medicines proprietary and patent, except such as contain cocaine, santonin, cod-liver oil, opium or opium alkaloids."

Medicines hitherto prohibited solely because they contain quinine may, therefore, with the exception of quinine sulphate, be exported without licence or guarantee to all non-enemy destinations.

THE ENERGY OF EXPLOSIVES.—"It may safely be said that there will never be an explosive which can give out nearly as much energy as an equal weight of coal or petroleum. Nitro-glycerin stands first of our most violent explosives, and yet the power it can generate is less than one-sixth of that given by the combustion of an equal weight of good coal."—Lord Moulton (in the *Rede Lecture*).

Trade Report.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities.

42 Cannon Street, E.C. 4, June 12, 3 p.m.

IN spite of the distraction of the Whitsuntide holidays, quite a fair amount of business has been done in chemicals and drugs, the hot weather having assisted the consumption of many products, particularly materials used in the aerated water and brewing industry, while certain antipyretics have been in good demand. The changes in values have been few. Among the fine chemicals and allied products acetanilide continues depressed; aspirin is unchanged and in good demand. Atropine is lower. Benzoic acid continues to ease, likewise benzaldehyde. Bromides and cocaine are unaltered. Chloral hydrate has been in improved request. Phenacetin and phenazone continue to recede owing to keen competition. Quicksilver is firm, and the large arrival of quinine under Government control is a feature. Saccharin is in brisk export demand. Salicylates are still weak, but the very low prices recently quoted for American salicylic-acid powder are not so prevalent; salicylate of soda is steady. Vanillin remains firm, with light stocks. The demand for photographic chemicals like hydroquinone and pyrogallol acid is brightening. Japanese refined slab camphor and English flowers have further advanced. Menthol is fully steady. Other alterations include an advance in sulphate of soda owing to the brisk demand. Star-anise and lemon oils are firmer; clove is rather weaker and distilled lime oil lower. In the drug and drysaltory section, bayberry-bark is cheaper. Ipecacuanha maintains last week's advance. Copaiba and balsam tolu are very firm. American peppermint oil is easier. Cumin-seed is dearer, and cascara sagrada is steady. Cod-liver oil is almost a dead letter. Linseed oil and shellac are dearer. Glucose has been heavily sold, and there has been a brisk trade in citric and tartaric acids and lime-juice.

Higher	Firmer	Easier	Lower
Camphor (Eng. flowers)	Anise oil, star	Acetanilide	Atropine
Camphor (Jap. slabs)	Lemon oil	Calcium lactate	Bayberry-bark
Cumin-seed	Rape oil	Citric acid	Benzaldehyde
Hen-yolk		Clove oil	Camphor
Linseed oil		Cloves	monobrom.
Shellac		Benzoic acid	Fusel oil
Soda sulphate		Farina	Lime oil (W.I.)
Turpetinc		Mace	Paraldehyde
			Phenacetin
			Phenazone

ACETANILIDE.—The large stocks on hand leave this product in a depressed condition, sellers quoting from 2s. 3d. to 2s. 1d. per lb., as to quantity.

AGAR-AGAR is quiet, with spot sellers of No. 1 Japanese strip at 2s. 9d. per lb. on the spot.

ALBUMEN is firm at 4s. 6d. per lb. on the spot for Chinese egg, and for May-June and June-July shipment 4s. 3d. to 4s. 5d. per lb. c.i.f. has been paid.

ALOES.—The exports from the Union of South Africa during March amounted to 252,523 lb., valued at 2,603*l.*, against *nil* in March 1918. During the three months ended March 1919 the exports were 455,207 lb. (4,742*l.*), against 153,584 lb. (1,312*l.*) in 1918.

ANISE OIL, STAR, is firmer, with spot sales of "Red Ship" brand at 4s. 6d. to 4s. 9d., and sellers to arrive at 4s. 7*½*d. per lb. c.i.f. with buyers at 4s. 6d. Speculative interest is being shown in view of an anticipated German demand.

ASPIRIN is unchanged, but the demand is well maintained, and the English makers have no difficulty in disposing of their production.

ATROPINE.—The demand since the war appears to have sensibly declined. Sulphate can be had at 65s. per oz. and

the crystals at 75s. per oz. There is room, however, for a further decrease in these prices.

BALSAM TOLU remains firm at 6s. per lb. on the spot.

BAYBERRY-BARK is cheaper at 1s. 1d. per lb. on the spot.

BENZALDEHYDE is in good demand from manufacturing perfumers, and the price is rather lower at from 5s. to 4s. 9d. per lb.

BENZOIC ACID.—The price continues to dribble away, and it can be bought at 5s. per lb.

BERGAMOT OIL.—Prices for shipment from Italy are irregular at from 16s. up to 21s. per lb. c.i.f., as to shipper.

BROMIDES.—There is slight ground for any change in a downward direction in the United States, as present prices are considered to be very low. Imports are coming forward very slowly, and the stocks are gradually being depleted. It is probable that in future preference will be given to imports from the United States rather than Germany.

BUCHU.—The exports from the Union of South Africa during March 1919 amounted to 42,488 lb. (9,106*l.*), against 24,905 lb. (3,605*l.*) in March 1918. The total for the three months ended March 1919 is 64,026 lb. (12,853*l.*), against 48,372 lb. (7,824*l.*) in the corresponding quarter of 1918.

CALCIUM LACTATE is easier at 8s. 6d. per lb. on the spot.

CAMPHOR MONOBROM. is cheaper, English makers offering at 10s. 6d. per lb.

CAMPHOR (REFINED).—Japanese 2*½*-lb. slabs are dearer, with spot sales at 13s. 6d. to 13s. 9d. per lb., the spot value closing at 14s., and July-August shipment has sellers at 12s. 6d. c.i.f. English flowers have been advanced to 12s. per lb. Japanese 4-oz. tablets have been sold at 14s.

CANARY-SEED is quieter, with some business doing at 195s. per quarter for fair Morocco on the spot.

CASCARA SAGRADA is steady, with spot sellers at 110s. per cwt., and to arrive 95s. per cwt. e.i.f. London is quoted.

CASSIA LIGNEA is firm, whole selected on the spot offering at 105s. and broken at 95s. per cwt.

CHLORAL HYDRATE has been in slightly better demand, but the price remains unaltered at 5s. per lb. for crystals in bond.

CITRIC ACID is firm at 4s. 4d. to 4s. 5d. per lb. on the spot.

CITRONELLA OIL is quiet, with spot sellers of Ceylon at 2s. 6d. and Java at 3s. per lb.

CLOVE OIL is slightly easier, offering at 11s. 3d. per lb.

CLOVES are quiet and easier, with spot sellers of fair Zanzibar at 1s. 2*½*d., and to arrive, July-September shipment is quoted at 1s. 2d. c.i.f.

COCAINE.—Hydrochloride is unchanged. The consumption in this country has appreciably declined during the past few months.

COD-LIVER OIL.—Our Bergen correspondent writes on June 4 that the Finmarken fishing is at a standstill owing to stormy weather. The official report of the fishing gives the following figures up to the end of May:

	1917	1918	1919
Catch of cod (millions)	23.8	21.4	26.7
Yield of c.l.o. (hect.)	33,600	18,200	32,900
Liver for "raw" oils (hect.)	4,100	12,000	4,900

In London there appears to be little demand, and finest new Iofoten non-freezing oil is obtainable at 435s. per barrel ex wharf; for shipment it is probable that bids of 400s. per barrel c.i.f. would be put forward. It is difficult to understand the attitude of Norwegian refiners in not wishing to resume business on more liberal lines in this important product, but so far as this country is concerned there is not likely to be much activity before the autumn.

COPAIBA remains firm, B.P. quality offering at 4s. 3d. per lb. and Para at from 3*½*d. to 2s. 6d.

COPPER SULPHATE.—American exporters are very anxious for business in Mediterranean ports, and are soliciting orders at about 45*l.* per ton c.i.f., but without finding buyers, as the season is closed until September-October. There is going to be keen competition for business in that quarter in future, and we should not be surprised if Japan enters the lists.

CORIANDEER-SEED is unchanged, with sellers of good Morocco at 29s. 6d. per cwt.

CUMIN-SEED is much dearer owing to a good export demand. A fair quantity has changed hands at 42s. 6d. up to 50s. per cwt., with further buyers, but holders are reserved.

DILL-SEED.—Further sales of East Indian have been made at 29s. per cwt.

EGG-YOLK is dearer, the sales including *liquid*, China, 2 per cent., afloat, at 125s. to 130s. per cwt.; June-July and June-August shipment at 115s. to 120s. c.i.f. *Dried whole* on the spot has been sold on the spot at 3s. 6d. and afloat

at 3s. c.i.f. *Yolk* is 2s. 6d. on the spot, and for June-July shipment 2s. c.i.f. has been paid.

FARINA is quiet and slightly easier, with sellers of No. 1 Japanese at 46s. per cwt. on the spot, and May-July shipment at 46s. 6d. c.i.f. Sweet-potato flour has sellers at 38s. 6d. on the spot.

FENNEL-SEED is unchanged at 38s. per cwt.

FENUGREEK-SEED.—There is a slow demand, and quotations remain at 21s. to 23s. per cwt. for old and new crop Morocco respectively.

FUSEL OIL is cheaper, commercial offering at 2s. 3d. and pure at 2s. 6d. per lb., with quantity at less.

GINGER.—Firm at auction, 103 bags slightly wormy brown Calicut rough selling at 65s. 6d.; 399 bags washed rough and partly wormy Cochin were bought in at 65s.

GLUCOSE meets with a good demand, principally on brewers' account, and there is a possibility of it becoming scarce again.

GUAIACOL CARBONATE is offered at 32s. 6d. per lb. on the spot.

HYDROQUINONE is in much more brisk inquiry, the price being unchanged at 10s. 6d. per lb.

IPECACUANHA.—The stocks in the drug warehouse at the end of May amounted to 152 packages *Matto Grosso*, 3 Minas, 19 Cartagena, and 86 East Indian, or a total of 260 packages, against a total of 553 packages in May 1918. The deliveries during May were 99 *Matto Grosso*, 7 Cartagena, and 11 East Indian. Second-hand holders ask 13s. 6d. per lb. for fair *Matto Grosso*.

LEMON OIL.—Sicilian cables notify an advance to 4s. 6d. per lb. c.i.f. to arrive; spot value is 4s. 6d.

LIME-JUICE is in good demand at from 2s. 9d. to 3s. per gal. for West Indian raw.

LIME OIL.—Fair West Indian distilled is rather lower at 4s. per lb. on the spot.

LINSEED OIL is very firm and dearer, with spot sales up to 120l. per ton naked, June at 117l. to 118l., and July-August 110l. per ton.

MACE.—At auction 24 cases Java sold, comprising fair flat slightly wormy at 1s. 3d. to 1s. 4d. and good bold at 1s. 5d. to 1s. 6d.

MERCURIALS.—Makers' prices are as follows: Subchloride, B.P., 6s. 8d.; perchloride, B.P., 6s. 4d.; ammoniat., B.P., 7s. 4d.; iodid. rub., B.P., 13s. 4d.; virid., 12s. 10d.; oxid. flav., B.P., 7s.; oxid. rub., 7s. 7½d.; persulph., 5s. 10d.; salicylate, 14s.; sulphuret. nig., 5s. 8½d.; cum creta, B.P., 2s. 8d. per lb. net.

METHYL SALICYLATE is quiet at 2s. 3d. per lb. on the spot.

PARALDEHYDE is cheaper, English makers offering at 4s. 3d. to 4s. per lb., as to quantity, whereas American is quoted at 5s. to 4s. 9d.

PEPPER has been steady, with spot sales of fair *black* Singapore at 11d. per lb., and for July-September shipment sales have been made at 10½d. per lb. c.i.f. London. Tellicherry is quoted at 11½d. (buyers), and Aleppy at 10½d. on the spot. *White* Singapore is firm, and quoted at 1s. 4½d., and Muntok at 1s. 4½d.; to arrive. Muntok has been sold for June-August shipment at 1s. 4d. to 1s. 4½d., and July-September shipment at 1s. 4d. c.i.f. London.

PEPPERMINT OIL.—American has eased down somewhat, with the idea of encouraging buyers, and 42s. per lb. will buy best tin oil.

PHENACETIN.—Orders are being received freely, but the consignments notified last week have caused the spot price to recede to 15s. 3d. and even 15s. per lb.

PHENAZONE.—Prices continue to be cut freely by dealers, and 27s. 6d. per lb. is willingly accepted even for small orders.

PIMENTO is quiet, with spot sellers at 5½d. per lb.

POTASH PERMANGANATE.—The parcels of Japanese make which have been depressing the market appear to have gone into consumption, and it is not easy to buy under 3s. 6d. per lb.

QUICKSILVER.—The market is dealt with editorially (p. 73). The leading importers' price is firm at 18l. per bottle.

QUILLAI.—Cut is offered at 95s. per cwt. on the spot.

QUININE.—The announcement made last week appears to have caused great satisfaction in druggists' circles. Arrivals aggregating 3½ million oz. Java have taken place for disposal under Government control.

RAPE OIL is dearer at 100l. per ton for crude and 104l. for refined on the spot.

SACCHARIN.—The export demand is very brisk, and the prices which are being paid tend to show that the second-hand lots in bond are being cleared off the market. From 13s. to 20s. per lb. in bond has been freely paid.

SALICYLIC ACID.—The former very low prices for acid powder quoted from the United States do not now appear to be so prevalent, and the values there are 2c. to 3c. per lb.

better. This may probably be due to the firmer tendency in carbolic acid on that side. English make is unchanged at 1s. 6d. per lb., and American a little cheaper.

SALOL remains stagnant at from 4s. 3d. to 4s. per lb. There should be a revival in the demand from the East for this intestinal antiseptic during the hot weather.

SHELLAC is firm and dearer, with spot sales of the usual standard TN quality at 335s. to 337s. 6d. in bags and 340s. in cases; fine Orange is quoted at from 380s. to 390s., blocky AC Garnet at 275s., and G.A.L. at 260s. To arrive, the sales include TN Orange for June-July shipment at 295s. to 297s. 6d. c.i.f. Futures are higher, the sales including August delivery at 335s. to 339s. to 337s., and October 337s. to 340s. to 339s.

SODA SALICYLATE.—In spite of the wide difference between acid and soda, the latter still keeps steady at 2s. 9d. to 2s. 6d. for powder, with American at slightly less.

SODA SULPHATE.—Howards notify the following advances: Ordinary, in 1-cwt. bags, 8s. 9d.; large needles and granular, in bags, 10s. 9d.; small feathery (Mock Epsoms), in bags, 10s. 9d.; medium, in bags, 13s. 9d.; peas, 11s. 3d.; powdered, 27s.; exsicc., 27s.; ditto, in jars, 29s. 4d.; effervescing, 3s. per lb., B.P. quality 3s. per cwt. extra, and recrystallised 3s. per cwt. extra; 28-lb. parcels 1s. per cwt. less.

TARTARIC ACID is firm at 3s. 3½d. per lb. on the spot.

TURPENTINE continues active, the spot quotation for American closing at 105s. per cwt.

VANILLIN is firm, with spot sales at 45s. per lb. Stocks are on the light side.

WAX, JAPANESE.—Vegetable is steady, with spot buyers at 72s. 6d. per cwt., and sellers at 75s. The exports from Japan during February amounted to 213,354 kin, valued at 58,250 yen. During the two months ended February 28 they were as follows:

	1917	1918	1919
Kin ...	438,290	959,811	384,221
Yen ...	132,981	306,709	125,451

WOOD OIL.—Chinese is 105s. per cwt. on the spot.

Damaged Drugs at Auction.

The following goods were offered and sold for account of whom it may concern at auction on June 12, ex fire at New Cranes Wharves:

Sixty-seven cases cardamoms sold. Kobo smalls, slightly smoke damaged, 6s. 6d.; small to medium split ditto, smoke and water damaged, 3s. 1d. to 3s. 10d.; Ceylon smalls, smoke damaged, 4s. 7d.; tiny ditto, 3s. 8d.; medium to bold split ditto, 4s. 10d. to 5s. 2d.; badly smoke and water damaged, 9d. to 10d. Seeds, smoke damaged, 1s. 10d. to 1s. 11d.; small unbleached Mysore, slightly smoke damaged, 4s. to 4s. 1d.; smoke and water damaged, 3s. to 3s. 3d.; Malabar, slightly smoke damaged, 4s. 6d. to 4s. 7d.; smoke and water damaged, 2s. 1d.

Twenty-five cases menthol crystals, sound Suzuki, 24s.; one case ullaged, 20s.; 15 cases Japan mint oil, Shagawka brand, 5s. 5d.; part empty tins, 4s. 6d.; 70 cases star-anise oil, Red Ship in full sail, Cheong Loong, smoke and water damaged, 4s. 4d.

Seven cases globulus eucalyptus oil sold at 2s. to 2s. 1d. One hundred bags turmeric sold. Dull Madras finger, slightly wormy, smoke damaged, 42s.; sea, smoke, and water damaged, 27s. Sixty bales sandalwood chips sold, smoke damaged, 85s. to 90s. Forty cases Japanese wax sold, smoke and water damaged, 65s., 10 cases at 59s.

Three hundred and eighty-four bales African beeswax offered, and 159 sold; brown block at 7l. 12s. 6d. to 8l. per cwt.

Japanese Sulphuric Acid.

H.M. Commercial Attaché at Yokohama reports, under date August 10, that according to a recent article in the local Press the increased export of sulphuric acid from Japan to Russia and China since the beginning of 1918 has led to steadily advancing prices in Japan and a considerably increased output. Several manufacturers of fertilisers have reduced their output and are devoting their energies to the production of sulphuric acid, while a number of companies have been established for the production of this chemical alone. It is estimated that the rate of production in Japan at present is some 582,500 tons per annum. Of this quantity about 421,000 tons is consumed by manufacturers in the production of sulphate of ammonia, hydrochloric acid, etc., leaving some 160,000 tons available for general requirements in the country, which are about 100,000 tons a year. Thus there is about 60,000 tons available for export. It is taken for granted that now the war is concluded the export trade will fall off, and it is also probable that there will be a considerable decline in domestic requirements.

Arrivals of Chemicals, Drugs, etc.

The following arrivals have taken place at the ports named:

London (May 27 to June 2). Almonds, (Gibr.) 59 bgs., (Sp.) 375 bgs. 650 bxs. 97 sks., (Mor.) 2,489 bgs. Alumite (Aust.), 320 tons Barytes, (U.S.) 125 brls., (Sp.) 3,265 bgs. 1,320 brls. Chemical products, etc.: Argol (It.), 386 bgs. Arsenic (Port.), 42 brls. Barium chlor. (Fr.), 10 brls. Citric acid (It.), 20 cks. Potash, not descr. (Belg.), 30 tons Potashes (Can.), 5 cs. Potash ferrocyan. (Holl.), 14 cks. Tannic acid (Fr.), 15 cks. Tartar, (Sp.) 106 sks., (It.) 88 brls. Tartaric acid (It.), 16 cks. Zinc oxide (N.Y.), 320 brls. Drugs, crude: herbs, med. (It.), 43 brls. Aloes (B'bay), 45 kgs. Balsam tolu (N.Y.), 100 cs. Benzoin (S'pore), 139 cs. Camphor (Port.), 72 cs. Canada balsam, 5 cs. Caraway seed (Holl.), 20 bgs. Cardamoms (B'bay), 85 cs. Cinchona (E.I.), 130 bls. Cocculus indicus (Coch.), 50 bgs. Coriander (Mor.), 1,000 bgs. Cumin seed (Mor.), 60 bgs. Fenugreek seed (Mor.), 900 bgs. Juniper berries (It.), 40 bgs. Liquorice juice (It.), 132 cs. Nuxvomica, (B'bay) 792 bgs., (Coch.) 1,686 bgs. Orris (It.), 40 bgs. Saffron (Sp.), 1 cs. Senega (U.S.), 20 bls. 19 bgs. Drugs, medicines, etc., undescribed, (Fr.) 48 cs., (Belg.) 11 cs.; figsyrup (U.S.), 7,200 cs. 66 drms.; glycyrrhizine (N.Y.), 748 bxs.; urodonal (Fr.), 72 cs.; vaseline (N.Y.), 1,289 cs. Dyes, dyeing and tanning materials, etc.: aniline, not descr. (Belg.), 52 cks. 2 cs.; cochineal, 21 bgs.; cutch (S'pore), 1,691 bgs.; tanning extract, (U.S.) 150 brls., (Aust.) 162 cs.; myrabolans, 607 bgs. Farina (U.S.), 1,440 bgs. Gelatin (Sp.), 34 cs. Glucose (N.Y.), 664 brls. Gums, resins: damar, (S'pore) 500 bgs. 80 cs., (S.S.) 5 cs., (R'dam) 2 cs.; sandarac (Mor.), 72 bgs.; tragacanth (B'bay), 187 cs.	Honey, (Jam.) 24 pkgs., (N.Z.) 362 cs. Lanoline (Aust.), 51 cks. Lime-juice (Jam.), 29 cks. Lithopone (N.Y.), 20 brls. Oils, essential, not described, (Sp.) 4 drms., (Sic.) 196 X 1/2 cs. 36 pkgs., (It.) 30 pkgs.; bay (W.I.), 1 cs.; cananga (S'pore), 4 drms.; citronella (S'pore), 100 drms.; lime (W.I.), 4 cs.; turpentine (Swed.), 20 brls. Oils, fixed: coconut, (Holl.) 430 brls., (Cochin) 5,220 cs.; cod-liver, (Norw.) 250 brls., (R'dam) 50 cs.; cottonseed (R'dam), 452 brls.; olive, (Gibr.) 265 brls., (It.) 8 cks.; palm (R'dam), 613 brls.; peach kernel, (N.Y.) 28 drms., (R'dam) 188 brls.; rape (R'dam), 273 brls. Perfumery (Fr.), 56 cs. Seeds: canary (Mor.), 10,810 bgs.; cashew (B'bay), 10 cs.; copra, (E. Af.) 1,122 bgs., (S'pore) 6,925 bgs., (S.S.) 6,465 bgs.; dari (Mor.), 4,202 bgs.; ground-nuts (Sp.), 150 bgs. 250 sks.; illipe nuts (S'pore), 739 bgs.; lin (B'bay), 5,262 bgs.; millet (Mor.), 501 bgs. Spices: chillies (E. Af.), 100 bgs.; cloves, (E. Af.) 395 bls., (S.S.) 20 cs.; ginger (Coch.), 27 bgs.; pepper, (S.S.) 295 bgs., (B'bay) 1,387 bgs. Wax, not described (E. Af.), 17 blks. 263 bls. Wax, bees', (E. Af.) 96 blks., (Mor.) 156 bgs., (Cal.) 55 pkgs.	Squill (Sic.), 40 bgs. Veratrine (N.Y.), 5 cs. Dyes, dyeing and tanning materials, etc.: tanning extract, (U.S.) 3,701 brls., (Fr.) 153 cks.; quebracho (R. Plate), 39,147 bgs.; valonia (Smyr.), 928 sks. 399 tons, 3 cwt. Ginger (Jam.), 26 brls. 8 bgs. Glucose (N.Y.), 1,423 brls. Gums, resins, etc.: damar (Java), 100 cs.; resin (Sp.), 270 brls. Honey (Chile), 33 brls. Oils, essential: (Sic.) 2 X 1/2 cs., (Fr.) 2 cks.; turpentine (U.S.), 4,451 brls. Oils, fixed: palm, (W. Af.) 3,245 cks.; soya (Jp.), 6,000 cs.; whale (U.S.), 25,800 brls. Perfumery (Fr.), 43 cs. Seeds: castor (B'zil), 600 bgs.; cotton (B'zil), 20,259 bgs.; ground-nuts, (Ch.) 1,852 pkgs., (Sp.) 250 bgs., (W. Af.) 5,820 bgs.; palm (W. Af.), 24,614 bgs.; rape (E.I.), 6,022 bgs. Wax, carnauba (B'zil), 5,267 bgs., 10 pkgs.	Folkestone (May 26 to 31). Almond oil (Fr.), 12 cs.; drugs, not descr. (Fr.), 14 pkgs.; perfumery, 28 pkgs. Glasgow (May 26 to 28). Calcium borate (U.S.), 2,165 bgs.; resin, (U.S.) 1,500 brls., (Sp.) 375 cks.; sperm oil (Port.), 502 brls. Hull (May 26 to 30). Formic acid (R'dam), 181 carboys; linseed (R. Plate), 104,145 bgs. Leith Medicinal oil (Iceland), 119 brls., 5 cks. Manchester (May 23 to 29). Drugs, barks and roots (Phila.), 11 cs.; dextrin (Phila.), 1,290 bgs.; lactic acid (U.S.), 25 brls.; starch, wheat (U.S.), 500 bgs. Newcastle (May 29). Cod-liver oil (Norw.), 75 brls. Southampton (May 26 to 31). Casein (Chan. Is.), 287 bgs.; cellulose acetate (Fr.), 120 bgs.; drugs (Fr.), not descr. 2 cs.; herbs, not descr., (Fr.) 7 sks., (Chan. Is.) 16 bgs.; resorcin (Fr.), 2 cs.; tartar (Fr.), 19 cks.; wattle extract (Cape), 5,220 bls. Almonds (Port.), 125 serons. Barytes (U.S.), 816 brls.	Chemical products, etc., not described (Fr.), 24 pkgs. Acetic acid (N.Y.), 224 brls. Calc. citrate (S. Am.), 12 cks. Formic acid (R'dam), 195 djhus. Oxalic acid (R'dam), 12 cks. Potash iodide (Jp.), 10 cs. Saltpetre (E. I.) 1,200 bgs. Soda, caustic (N.Y.), 105 drms. Tartar (Fr.), 30 cs. Thymol (E.I.), 10 cs. Zinc oxide (R'dam), 400 cks. Drugs, crude, undescribed, (Fr.) 17 bls.; herbs, (Sp.) 56 bgs. Camphor, (Jp.) 130 cs., (Ch.) 25 cs. Caraway (R'dam), 100 bgs. 150 bls. Cardamoms, (E.I.) 18 cs., (Cey.) 141 pkgs. Chamomiles (Belg.), 38 bls. Cinchona (Madr.), 46 bls. Lycopodium (N.Y.), 33 bgs. Menthol (Jp.), 25 cs. Nuxvomica, (Ch.) 673 bgs., 3,135 pockets, (Cal.) 69 bgs. 390 pockets Rhubarb (Ch.), 24 cs. Sandalwood (S'pore), 69 bskts. Senna (Tinn.), 91 bls. Tamarinds (W.I.), 400 brls. Valerian (Belg.), 35 bls. Drugs, medicines, etc., not described, (Ch.) 6 cs., (Fr.) 85 cs.; fig syrup (N.Y.), 3,600 cs. Dyes, dyeing and tanning materials, etc.: bark (Natal), 1,193 bgs.; divi divi, 649 bgs.; tanning extract (Fr.), 321 cks.; myrabolans (Cal.), 7,208 pkgs. 7,357 pkts. 17 bgs.; wattle bark (Natal), 2,057 bls.; wattle ext. (Natal), 6,919 bgs. Egg products: albumen (Ch.), 197 cs.; yolk (Ch.), 613 cs. 50 cks. Gelatin (Fr.), 40 cs. 51 bls. Glucose (U.S.), 60 brls. Gums, resins, etc.: copal (S'pore), 700 cs.; damar, (S'pore) 144 cs., (Java) 825 bgs.; lac, button (Cal.), 138 bgs.; seed 9 cnts.; shell (Cal.), 125 cnts. 1,305 bgs.; resin, (Fr.) 513 brls., (Port.) 200 brls. Honey (Aust.), 468 pkgs. Lime-juice, (S. Am.) 6 cks. 48 hhds., (W.I.) 17 hhds. 36 cks. Oils, essential, not described (Ch.), 12 cs.; anise (Ch.), 39 cs.; mint (Jp.), 277 cs.; turpentine, (Port.) 1,100 cs. 27 drms., (N'way) 53 brls. Oils, fixed: cocoa-butter, (Holl.) 100 bls. 350 bgs.; coconut, (Coch.) 129 pps., (R'dam) 93 brls. 18 hhds.; cotton seed (R'dam), 297 drms.; groundnut (Ch.), 150 cs.; lime (W.I.), 6 cs.; palm (R'dam), 98 brls.; rape (R'dam), 100 brls.; soya bean (Jp.), 10,000 cs.; wood (Ch.), 145 cks. 285 cs. Perfumery (Fr.), 10 cs. Seeds: copra, (S'pore) 13,053 bgs., (S.S.) 797 bgs., (Maur.) 1,134 bls., (N.Y.) 4,160 bgs.; ground-nuts, (Ch.) 760 bgs., (S'pore) 1,405 bgs.; hemp (Jp.), 700 bgs.; lin, (Cal.), 37,599 bgs.; palm kernels (Ch.), 500 bgs.; soya, (Jp.) 50 cs., (S'hai) 5 bgs.; Soy (Ch.), 285 cs. Spices: cassia (Ch.), 700 cs.; cinnamon (Cey.) 255 bls., (chips) (Cey.), 200 bls.; ginger (Ch.), 1,025 cks.; mace (S'pore), 22 cs.; nutmegs, (S'pore) 59 cs., (S. Am.) 17 bgs.; pepper (E.I.), 8,210 bgs. Sponges (Gre.), 770 cs. 6 bgs. 115 bls. Starch wheat (N.Y.), 1,600 bgs. 850 bxs. Talc (Fr.), 1,039 bgs. Wax, not described (N.Y.), 450 brls. Wax, bees' (Cal.) 50 bds. 67 cs., (W.I.) 37 pkgs., (Port.) 321 pkgs.	Glucose, (Mont.) 950 brls., (N.Y.) 1,959 brls. Oils, fixed: coconut (S'pore), 292 brls.; cod (Halif.), 606 cks.; cod liver (Halif.), 600 cks.; cottonseed (U.S.), 6,613 brls.; palm oil (W. Af.), 2,900 cks. 1,249 brls.; whale (S'het. Is.), 15,802 brls. Perfumery (Fr.), 66 pkgs. Pepper (S'pore), 233 bgs. Petrol, jelly (N.Y.), 80 brls. Seeds: copra (S'pore), 381 bgs. (W. Af.) 13 pkgs.; cotton, (Peru) 1,568 sks. (S. Am.) 10,919 bgs.; groundnuts (Braz.), 31,264 hectos. 50 centals, (W. Af.) 24,203 bgs. 312 pkgs.; illipe (S'pore), 9,626 bzs.; palm kernels (W. Af.), 18,860 bgs. Turpentine (U.S.), 10,250 brls. Wax, candelilla (U.S.), 13 sks. Wax, paraffin (N.Y.), 1,017 bgs. 8,466 brls. Folkestone (May 31 to June 5). Almond oil (Fr.), 20 cs.; oil, not descr. (Fr.), 10 pkgs.; perfumery (Fr.), 2 cs. 53 pkgs.; peppermint oil (Fr.), 4 cs. 1 Glasgow (May 31). Cardamoms (B'bay), 10 cs.; castor seed (B'bay), 350 bgs.; cloves (B'bay), 175 bds.; extract (Fr.), 789 cks.; gum, not descr. (B'bay), 20 cs. 382 bgs.; myrabolans (B'bay), 2,688 bgs.; pepper (B'bay), 108 bgs.; talc (Fr.), 65 cs. — Hull (May 31 to June 5). Essential oils (Sic.), 48 cs.; rose (B'bay), 2 pkgs.; formic acid (R'dam), 80 cys.; honey (S. Aust.), 2,373 cs.; juniper berries (It.), 9 bgs.; lithopone (R'dam), 40 cks.; myrabolans (B'bay), 10,359 bgs., (crushed), 1,318 bgs.; orris (It.), 4 bgs. Seeds: cotton (B'bay), 5,600 bgs.; jamba (E.I.), 1,656 bgs.; niger (B'bay), 70 bgs.; rape (E.I.), 63,159 bgs.; sumac (It.), 100 bgs.; tartar (It.), 10 cks. Manchester (June 4 to 5). Calcium phosph. (U.S.), 95 brls.; caraway seed (R'dam), 200 bls.; lithopone (R'dam), 200 cks. Newcastle (June 3). Cod liver oil (Norw.),
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Letters for this section should be written on one side of the paper only. The writer may adopt an assumed name for purposes of publication, but he must in all cases furnish his real name and address to the Editor.

Registering Apothecaries' Assistants.

SIR,—From the small amount of knowledge available it seems that to redeem the promise given by the Pharmaceutical Council in 1908 we have to swallow the inclusion of the apothecaries' assistants into the ranks of the qualified men. One can only lament the morality of a body of men who promise to perform certain things whilst they have no intention of carrying them out. To my mind there are two ways of dealing with the position:

(1) Petition the Privy Council to limit the activities of these Apothecaries' Hall men to the institutions wherein they received their training. That will protect the public. Everyone knows that "shop" pharmacy and "institutional" pharmacy are different in their scope. Limit these men to practising their own particular line, and you will keep them from seriously affecting the *bona-fide* trained Minor man.

(2) Failing this, institute a general boycott of these men from "shop" engagements.

Nobody will deny their capacity for hospital dispensing, but it will not be protecting the public if we allow them to keep open shop for the dispensing of medicines and the retailing of poisons. The Privy Council cannot resist a plea based on the genuine position of protection of the public.

Yours, etc.,

J. M. JOHNSON.

Harborne, Birmingham.

SIR,—I suggest that the Pharmaceutical Society imposes the following conditions, which I think are allowed under the by-law:

(1) Applicants must obtain the signatures of two members of the Pharmaceutical Society who consider them to be fit and proper persons for registration.

(2) Applicants must prove to the President that they have a good knowledge of practical chemistry (*i.e.*, bring evidence showing that they have passed an examination or taken at least one year's course at a recognised school).

There is no practical examination in chemistry at the Hall, and a registered chemist should be able to do a simple volumetric and test a double salt.

Faithfully yours,

FRANK H. PLEWS.

SIR,—I note a recent advertisement for a hospital (locum) dispenser (male), qualified, salary 3*l.* 3*s.* weekly. I believe this is still a very usual rate of remuneration for such a post. Meanwhile, hall porters, dustmen, scavengers, and others are getting 3*l.* 10*s.* or more. Why on earth are the apothecaries' assistants worrying? They will do better as hall porters or dustmen than in the professional (?) ranks of pharmacy

Yours faithfully,

VERAX. (180/25.)

SIR,—If all the chemists in England signed a protest against the registration of the apothecaries' assistants in some form it would be unavailable. In the first place, apothecaries' assistants were managers for the old apothecary, and managed his shop during his visits, and passed an examination by virtue of an Act of Parliament in the fifty-fifth year of King George III.'s reign. Again, when the National Insurance Act came in the doctors no longer required a dispenser, and the Pharmaceutical Society gave an assurance in Parliament they would "take steps for their registration." They were a qualified body of men before the chemists had an examination. There is one thing I quite agree with in several remarks—that is, all should pass an equivalent examination to the chemists' Preliminary. My idea is that an apothecary's assistant who had passed before the National Insurance Act came in force should be registered (1) as a chemist's manager, providing he had been not less than five years with a chemist or been apprenticed to a chemist; (2) he should be allowed to keep open shop and have his chance with the Insurance scripts and other prescriptions, but must put over his door "Apothecaries' Hall Assistant." As a matter of fact, I don't see why chemists should grumble; they have taken the bread out of the mouth of the apothecary's assistant,

and in many cases doubled their returns. This is by a chemist's son who has had over thirty years' experience.

Yours,

FAIRPLAY II. (173/14.)

SIR,—The Government having appointed a Minister of Education, what I should like to know is, Is it his duty to see that education is advanced by honourable and straightforward methods? If so, will he allow persons who have not passed the compulsory examinations required by the Government to be placed on the Register of Chemists and Druggists on payment of the fees alone, knowing at the same time that it is necessary for them to have acquired the knowledge by legitimate means to pass those examinations? This is essential in order to protect and safeguard the public when dispensing and selling deadly poisons. If he cannot step in and prevent an injustice like this being done in which the very foundation of education is violated, what has he been appointed for? I have read with interest the report of Dr. Luff, who was one of my examiners, that the standard of education has been well maintained. Please note he was sent by the Government to see that the examination was properly conducted. What a farce it is taking all these precautions to see that fit and proper persons only are registered in order to protect the public, while the Council of the Pharmaceutical Society is holding open the back door with one hand, the other being extended for the fees, and is ready to admit without examination persons who according to the various Pharmacy Acts, are incompetent to carry out the requirements of those Acts.—Yours truly,

Burnley.

U. ATLMER COATES, M.P.S.

British Pharmaceutical Conference.

SIR,—In connection with the forthcoming British Pharmaceutical Conference, it is proposed to hold a smoking concert on Wednesday evening, July 23. The arrangements for this entertainment have been placed in my hands, and I should be very pleased if any lady or gentleman willing to contribute songs, recitations, instrumental solos, or any other "turn" on this occasion will send their name and the description of their item to me. It is hoped to make the "smoker" as successful as those which have been held in past years.

Yours faithfully,

F. W. CROSSLEY-HOLLAND.

1 Garden Court, Temple, London, E.C. 4.

Problems for the Industrial Council.

SIR,—When the machinery under the Ministry of Labour for dealing with the retail drug-trade is set in motion, whether as a Trade Board or as an Industrial Council, it will have some very intricate and delicate questions to settle. The first will be the rate of wages; and, taking the qualified pharmacist alone, the conditions are so varied that nearly every retail business requires a separate inquiry. There is the qualified manager of a branch pharmacy who has the entire charge, does the buying, engages and discharges employes, and in all respects performs the duties of a proprietor; in contrast to this, there is the qualified manager of a company shop whose every act is regulated by instructions from headquarters, and who is in consequence a mere figurehead. Then, again, the manager may live on or off the premises; he may be in a country area with light duties, or in a West-End district with heavy responsibilities; he may have to deal with a good many night calls, or with none at all. If the salary of a qualified manager were fixed, say, at 6*l.* weekly, it is obvious that all these men could not fairly be graded at the same rate; and where is the senior qualified assistant whose employer, having other business interests, is away for two or three days each week, leaving him in sole charge, to be classified? Furthermore, the question is complicated in the numerous cases where the manager draws a commission or percentage of profits in addition to a salary; possibly this would not be allowed under a standard wage. Secondly, there is the question of hours. If the national working week is to be forty-eight hours, either pharmacy will be exempted as under the Shops Act, or there will be a permanent overtime rate; either of these solutions will interfere with the idea of a definite working week for employes. On the other hand, it is certain that under present conditions the profits will not allow an increase of staff to take shifts of duty, while the supply of medicine precludes the early-closing hours adopted by drapery and other retail concerns. Here, again, arises the question of the manager living on the premises; will he be paid overtime for each ring after hours, or for the time he stays in waiting for the late customer? And if the closing hour is 8 o'clock, presumably all assistants will be paid overtime after that hour if they stay to clear up the dispensing already in hand. Sunday duty is at present recognised in the trade, but, of course, under trade-union

conditions it would carry double pay. In any case the shortening of hours by State control would have to be accompanied by some guarantee that the pharmacist's work would not be driven into other channels, or else some latitude would have to be allowed to suit the requirements of each district. In many trades the union fixes the amount of work a man may do in order to afford the maximum of employment, so we must face the probability of a dispenser being restricted to fifty Insurance scripts daily, or a limited number of counter customers. From the assistants' point of view there are disadvantages as well as advantages from union organisation, especially when affiliated to wholesale workers, as if there should be a dispute in the wholesale trade in Liverpool, for example, the whole of the retail members in London or elsewhere would be liable to be called out on strike in support, and also in addition to their annual subscription they might have to pay levies as well to other unions. On the other hand, there are certainly advantages to be gained, not merely directly in concessions of wages and hours, but in more fundamental matters, including obligatory apprenticeship, with time for attendance at lectures, and a system of business as well as scientific training. One can even have visions of the future when, taking an example from the Great Triple Alliance, the Pharmacists' Union will call on the Government to carry out the proper working of the Pharmacy Act for the national benefit, and see that there is a qualified man in charge of every shop, dispensary, or other place where medicines are dispensed to the public, and their claims would be supported by the affiliated unions of Chemical Workers, Warehouse and Transport Workers, who would refuse respectively to manufacture, supply, or deliver drugs to non-unionists.

Yours truly,

LONDON CHEMIST. (119/9.)

The Economic Position.

SIR,—Truly the workings of the pharmaceutical mind are wonderful. After listening to endless speeches at various meetings and reading numerous letters and articles on the danger of the new by-law, the cry of pharmacy for the pharmacist, the prevention of doctors dispensing, the status of pharmacists in the Army, company chemists, and all kindred subjects, I now learn from the President of the East Anglia Federation (*C. & D.*, June 7, p. 66) that prescriptions are our *bête noire*, and that it pays us far better to sell patents. Why, oh why, did I serve long years of apprenticeship, why more foolishly attend a session at the "Square," and, worst of all, squander my hard-earned cash in Minor fees, when I can get a patent-medicine licence for 5s. and make more money? It is not to be wondered at that pharmaceutical stock is so much below par when our leaders express such opinions, nor is it surprising that the Privy Council takes us at our own valuation and considers that we should admit unexamined men to the Register. With regard to this examination question, the Council of the Pharmaceutical Society reminds me of the man who sat on the branch of a tree to saw it off. Whilst there is all the agitation for a curriculum and better training of candidates, the Council seem to be trying their hardest to depreciate the Qualifying examination, as, of course, once having admitted one section of men without examination, they will probably have to admit all the others, when No. 17 and Galen Place will be back numbers, as very few men will waste time over the Minor for the sake of enjoyment.

Yours faithfully,

CHAS. HAMUS.

Recognising War-service.

SIR,—Would it not be to the interests of chemists generally that *bona-fide* apprentices and assistants who have served and are serving with the Colours (in the European War) should be excused the Preliminary and registered as students by the Pharmaceutical Society on presenting proof of such service? The Society would thus honour its future members, and, what is more, would help those who by their service and sacrifice saved the Empire.—Yours faithfully,

PATER MILITIS.

Assistants' Unions.

SIR,—In view of the numerous associations springing up for assistants to meet the requirements of the Ministry of Labour, would it be possible to give a list of such associations, indicating which are run by genuine pharmacists as distinct from professional Labour men, so that the ordinary assistant may know what he is joining? I presume all these bodies will have to amalgamate to form a definite body for negotiation.

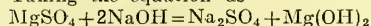
Yours faithfully,

BEWILDERED ASSISTANT. (7/6.)

Dispensing Difficulties and Notes.

Magnesium Hydroxide in Mixture.

SIR,—Having been previously indebted to you in former cases of uncertainty, I should be grateful for your help once more. I have an inquiry from a doctor who wishes to prescribe a mixture of mag. sulph. and sod. hydroxide in order to obtain, in a tablespoon dose, 15 to 20 gr. of mag. hydrox. Can such a mixture be satisfactorily prepared at the dispensing counter without the elaborate process for mist. cremor. hydrox., B.P.C.? The doctor wishes to know what proportions of mag. sulph. and sod. hydrox. to prescribe. Taking the equation as



and then taking the molecular weights, I arrive at these quantities: Mag. sulph. 5j. + sod. hydrox. gr. 320 yield 14½ gr. mag. hydrox. in one tablespoonful dose in an 8-oz. mixture. Is this correct? Yours truly,

S. G. M. (134/70.)

[Allowance requires to be made for the water of crystallisation; 246 gr. of magnesium sulphate yield about 58 gr. magnesium hydroxide when precipitated by sodium hydroxide, of which, taking it as 95 per cent. pure, 85 gr. is required. You require 240 gr.—i.e., 8 fluid oz. with 30 gr. per fluid oz., therefore the quantities to employ are:

Mag. sulph.	1,020 gr.
Sod. hydrox.	352 gr.

If the prescriber wants the magnesium hydroxide and sodium sulphate to be administered together, all that is required is to dissolve the respective salts in separate portions of water and mix the two solutions. If the magnesium hydroxide alone be wanted, it will be necessary to wash the precipitate until the wash-water is fairly tasteless; this can be most quickly accomplished by decantation; washing on a cloth would require days.]

Subscribers' Symposium.

For interchange of opinion among "*C. & D.*" readers, and brief notes on business and practical topics, especially new ideas.

Price of Mixture.

Welsh Chemist (177/50) has been charging 2s. 3d. for the following, and his customer tells him she pays 1s. 6d. in a neighbouring city. The customer brings the bottle each time.

Ammon. brom.	gr. xij.
Liq. Fowleri	℥iij.
Tinet. sumbul.	℥xv.
Syr. glycerophosph. co.	3j.
Aq. chlorof. ad	3ss.

Mitte 3viii.

Our correspondent asks us to obtain the opinion of our readers on the fairness of his charge.

A Problem of Heredity.

Offspring (61/9) writes: We have a customer, Mr. X, who has discovered that his father suffered from syphilis before marriage, although he lived to a fair age, and died from another complaint unconnected with it. X appears to be untainted, as he is well developed bodily and mentally, teeth good, etc., and has been examined by his own doctor and a specialist with negative results; the only thing he can point to is slight depression and nervous irritability when overworked. Now X contemplates matrimony, and he is anxious to know if his offspring (if any) are likely to be mentally defective or otherwise abnormal, and also if he went to the expense of a Wassermann test whether the result could be taken as a guarantee of his fitness or otherwise.

Starting in Business without Capital.

Some time ago "*Jay Mack*" wrote a letter in the *C. & D.* in which he mentioned that the financial side of going into business could easily be arranged. This has brought "*Jay Mack*" several inquiries, and he asks us to insert his reply so as to save his time and to help other inquiries. There are several ways, as old as the hills: (1) Get a retailer to trust you. (2) Get a wholesaler to back you. (3) Or marry into the business. All these ways depend upon (a) knowledge; (b) energy; (c) dependability. There are good private chemists' shops. Quite 3,000 are or will be for sale; 2,000 are "no good"; and 1,000 are very good. Out of that 1,000, 500 will want cash down, and big lots of it; and 500 will be glad to meet you if you are "any good." You will be able to prove to them that you are "safe," and they in turn will be glad to let you buy on easy terms when they go into retirement. Find these men by advertising in the *C. & D.*; make it big, and keep it

running four or six weeks; describe yourself fully; state openly capital, even if only 50l. or 100l. Look up your references, including the Army; get in touch with travellers and wholesalers whose opinion of you would help. Then sit down and get busy on that advert. (like this):

Qualified (or unqualified) with succession; age thirty-five; married; two children; experience twenty years in (counties or towns); health "A"; capital 100l., in cash in bank; life insured for —l. Absolutely dependable. Willing to save 50l. or 100l. out of first year's salary and deposit the same in addition to present capital.—"David Brown," c/o wholesale house which knows you.

If you are not "Ye Righte Stuffe" then no power on earth can make you right.

Legal Queries.

R. T. B. (175/73).—There is no restriction upon the use of the shop title "Medical Hall" in Ireland so far as we are aware.

Doubtful (169/47).—The use of a brand name "Kure-All" on medicines would probably render all the articles upon which it was employed liable to stamp-duty.

R. W. W. (173/58).—The use of a brand name for the Little Liver Pills (formula reference given) may in certain circumstances take the pills out of the exemption of "known, admitted, and approved remedies."

G. H. (176/14).—REGISTRATION OF BUSINESS NAMES.—The forms required under the Business Names Registration Act are obtainable at any post office. Particulars are given on the form as to the procedure to be followed.

Palermo (182/51).—(1) "Blood Tonic" is a dutiable title, and the use of the trade-mark you suggest would probably constitute a further ground for liability. (2) No licence is required to manufacture medicinal spirituous preparations, but if wholesale druggists sell rectified spirit a spirits of wine licence is required. This costs 10l. 10s.

E. F. (182/54) is tenant of premises at a yearly rent which is payable quarterly. What notice must be given when the tenancy is terminated? [In the absence of circumstances indicating a contrary intention, the tenancy must be regarded as a yearly one, and is terminable by six months' notice, expiring upon an anniversary of the commencement of the tenancy.]

West Country (169/15).—(1) There is nothing to prevent you selling medicines on Sunday, but at present it is probable that the shop must not be open in the ordinary sense after 8 P.M. There is a doubt as to whether the Early Closing Order under the Defence of the Realm Act applies to Sunday business, the reason being that the Sunday Observance Act forbids any person exercising his business on the Lord's Day, works of necessity and charity excepted. (2) Apprentices and all other young persons under eighteen must not be employed more than seventy-four hours a week, including meal-times, and not more than twelve hours in one day, including one and a-half hour for meals. They must get a complete half-holiday once a week from 1.30 P.M., whether they are indoor or outdoor assistants.

J. B. H. (177/47) asks whether the landlord of a combined house and shop which are let under a lease which has several years yet to run is at liberty to increase the rent when the premises change hands. ["J. B. H." does not state the rent of the premises, nor does he state whether there is to be a fresh lease or merely an assignment of the old one, and in the absence of this and other information it is impossible to reply definitely to his question. If the original lease is assigned, the rent secured by it will continue to be payable. If, on the other hand, a new lease or tenancy agreement is entered into, the landlord is entitled to raise the rent to any extent, unless he is debarred from doing so by the Increase of Rent and Mortgage Interest (War Restrictions) Act, 1915, or the amending Act passed this year, under which no increase of rent which will make the rent more than 10 per cent. higher than the "standard rent" is recoverable. In the case of houses to which the earlier Act applies even this increase must not be made until six months after the termination of the war. So far as we know, the High Court has not yet decided whether the Acts mentioned apply to premises which comprise a shop as well as dwelling-rooms, and in the meantime we think it reasonable to assume that the restrictions do apply to premises of this nature, although there have, we believe, been County Court decisions to the contrary.]

Miscellaneous Inquiries.

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

G. W. (181/21).—FILM DEVELOPING.—The developer you are using is a good one, but in case of under-exposure the best plan is to dilute it to twice its bulk with water and leave the films in for a long time. Another plan is to use the developer warm.

Aspirin (London) (169/62).—SARSAPARILLA WINE.—The only formula we have for this consists of white wine, to which liquid extract of sarsaparilla has been added in the proportion of 1 oz. to a pint of wine. We think, however, that the "wine" sold by herbalists is more in the nature of a compound decoction.

Nemo (172/20).—EYE-BRIGHTENER.—A weak solution of belladonna (1 oz. tinct. bellad. in 20 oz. water) is sold for this purpose, but we believe that a weaker preparation is safer.

Lubricant (167/10).—OIL BLENDING.—Scott, Greenwood & Co. publish a book on this subject entitled "The Practical Compounding of Oils, Tallow, and Grease for Lubrication, etc." (7s. 6d.).

Aspirin (178/65).—VALUE OF A BUSINESS.—A business returning 900l. as the average of the past three years is a small affair, as this is about equivalent to 500l. in pre-war times. There may, however, be recommendations such as a chance of the business increasing considerably, a good house and position, and no opposition. The method of stock-taking adapted for the times is to take stock roughly, case by case, room by room, then divide the stock into quick-selling and slow-selling articles. The former may be reckoned at full prices, and the latter at 25 to 50 per cent. below cost. It is doubtful whether such a small business is worth any payment for goodwill, especially if it is being sold through the death of the former owner.

F. B. (175/32).—(1) ICE-CREAM POWDER:

Powdered starch ...	1 oz.
Powdered sugar ...	1 oz.
Powdered gelatin ...	30 gr.
Essence of almonds ...	mx.
Essence of vanilla ...	mx.

Azo-orange dye, to colour.

This quantity is added to a pint of milk, brought to the boil, cooled, and then put in the freezer.

(2) GINGER-BEER POWDER:

Bruised African ginger ...	5l.
Cream of tartar ...	3xxx.
Powdered sugar ...	3lx.
Oil of lemon ...	5j.
Powdered alum ...	5v.

Mix. Put up in 2-oz. packets.

The directions are: Pour 1 gal. of boiling water over the contents of the packet, let it stand for an hour, then add 1 lb. of sugar, 1 gal. of cold water, and two tablespoonfuls of brewer's barm or ½ oz. of German yeast spread on a piece of toast floating on the brew. Allow it to "work" for three or four hours, then strain through flannel, and bottle.

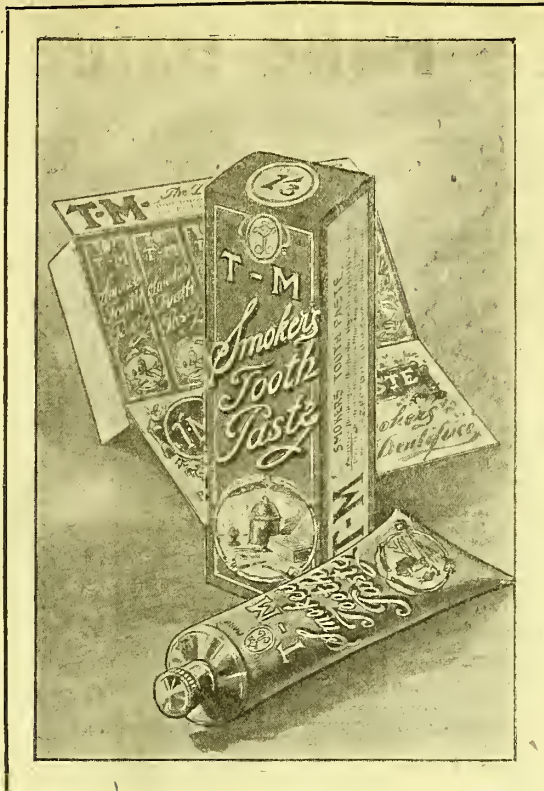
Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," June 15, 1869

Pharmaceutical Conversatione.

This year, so memorable for pharmacists—the year One, I may call it, of the new pharmaceutical era—has aroused an unprecedented interest in all matters concerning the business of chemists and druggists, especially among themselves, so that it is no wonder that the interesting annual *soirée* of the Pharmaceutical Society was the occasion of a larger gathering than has, perhaps, ever met in Bloomsbury Square. It may reasonably be anticipated that, in the future, these gatherings will increase in importance and interest, and will attract still larger numbers of the members and friends than heretofore; and yet it may be as reasonably doubted whether another fifty ordinary-sized pharmacists could be fitted into the Society's rooms by any process short of amalgamation. The Pharmaceutical Society is in a most flourishing condition, and certainly displays no niggardliness in providing this annual show.

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P. A. T. A.

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Better got up than ever. Made for and to appeal to smokers, and is available in any quantities. Is just about to be well advertised again in the press, and the public as usual sent to you. We strongly suggest prompt replenishment of stocks and showing them well to the fore, to catch this *profitable and assured* custom. "TM" Tooth Powder is also ready and sales are doubly easy with

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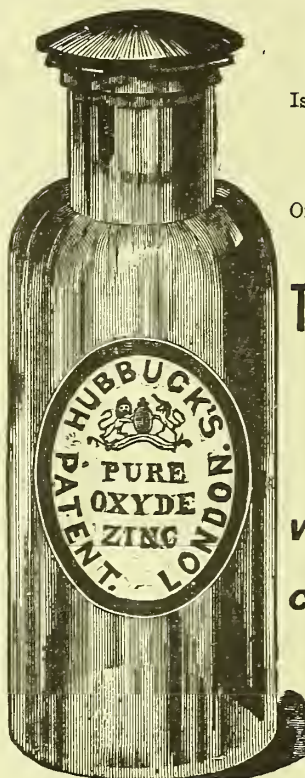
Sold by the following Wholesale Druggists
in Boxes of 7 lbs. and 14 lbs. stamped by
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1-lb. Glass Bottles:—

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Bell, Jno., & Co. [(Lim.)
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British Drug Houses (Lim.)
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Cockburn & Co. (Lim.)
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Ferris & Co.
Gale & Co.
Glasgow Apothecaries' Co.
Glasgow New Apothecaries' Co.
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Co.
Hatrack, W. & R., & Co.

Hirst, Brooke & Hirst.
Hodgkinson, Prestons &
King.
Hodgkinsons, Clarke &
Ward.
Horner & Sons.
Huskisson, H. O., & Co.
Inman's Stores (of Edinburgh).
Ismay, John, & Sons
Lofthouse & Saltmer
(Lim.)
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Pinkerton, Gibson & Co.
Raines, Clark & Co.
Raines & Co.
Rankin & Borland.
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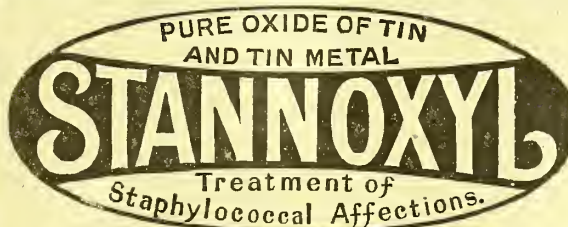
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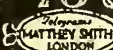
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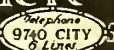
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- Gum Tragac. Elect., English Ground, 7 lbs. 13/- lb.; 1 lb. @ 13/6 lb.
- *Hedding (Frothing Ess.), 5 lbs. @ 2/8 lb.
Heliotropine, 1 lb. @ 35/- lb.
Hellebore, White, Powder (Foreign Ground), 1 cwt. @ 65/- cwt.
- Hexamethylenetetramine, 7 lbs. @ 7/6 lb.; 1 lb. @ 9/- lb.
- Honey, Jamaica, 23 lbs. @ 1/2 lb.
- Hydrargyrum, P.B., 10 lbs. @ 7/11 lb.; 1 lb. @ 8/2 lb.; Ammon., 23 lbs. @ 8/7 lb.; c. Creta, 23 lbs. @ 2/10 lb.; Iodid. Rub. 23 lbs. @ 14/- lb.; Oxid. Rub. 23 lbs. @ 8/7 lb.; Perchlor. Lump, 23 lbs. @ 8/4 lb.; Subchlor. 23 lbs. @ 7/6 lb.; Sulph. c. Sulph., 23 lb. @ 7/4 lb.; 7-lb. quantities 1d lb. extra, 3-lb. quantities 2d lb. extra, 1-lb. quantities, 3d lb. extra.
- Hydrokinone, 1 lb. @ 16/- lb.
- Ichthylol Ammon. chemical equivalent: Ammon. Ichthosulphonas, B.P. Codex, 7 lbs. @ 5/- lb.; 1 lb. @ 5/3 lb.
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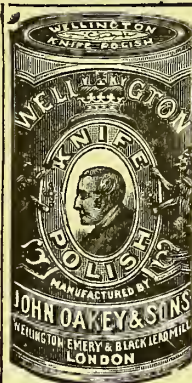


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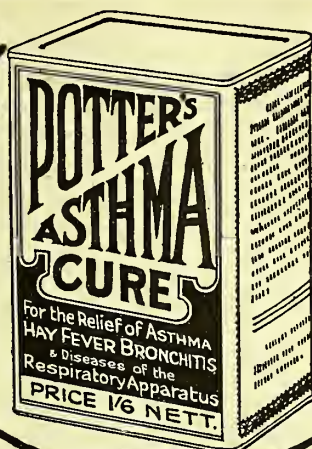
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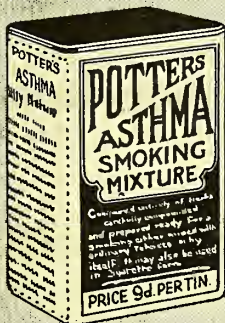
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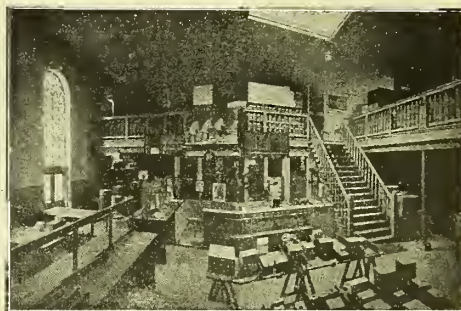
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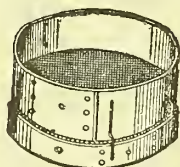
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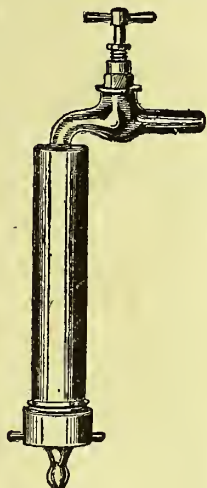
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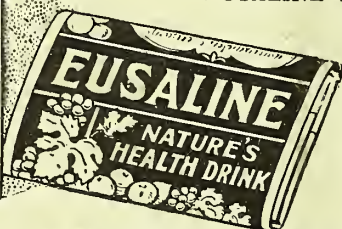
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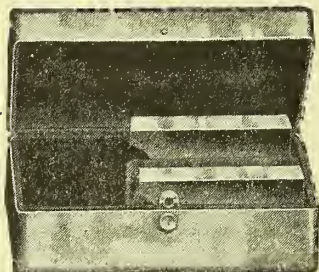
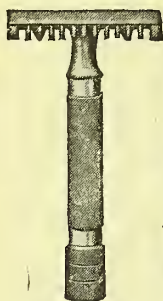
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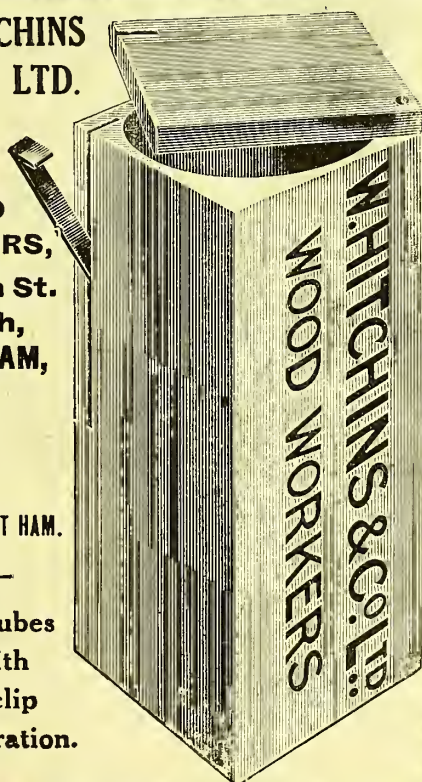
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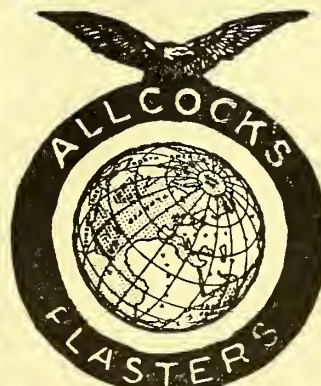
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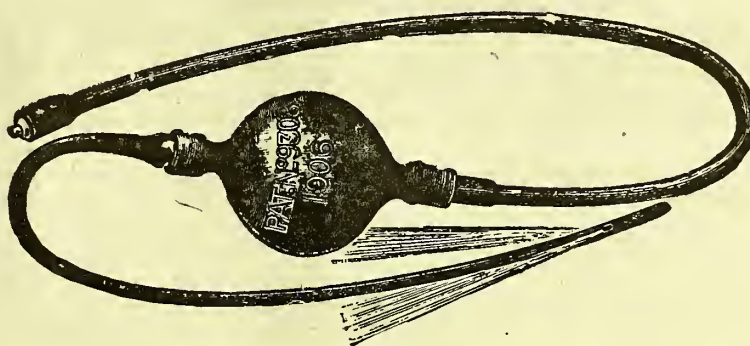
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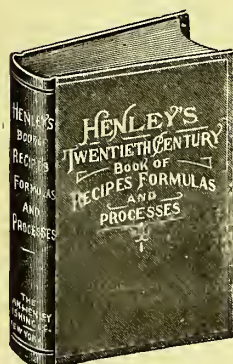
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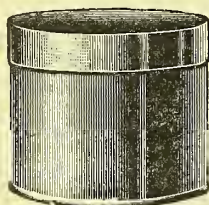
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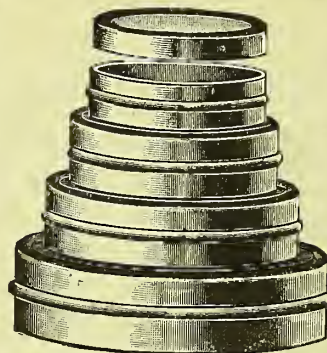
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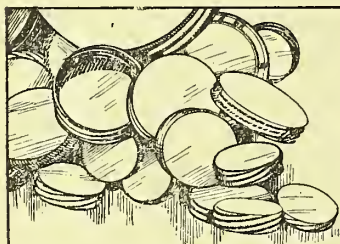
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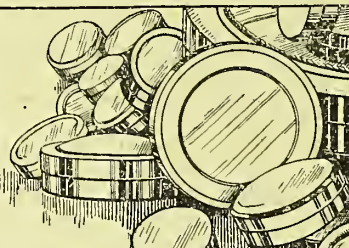
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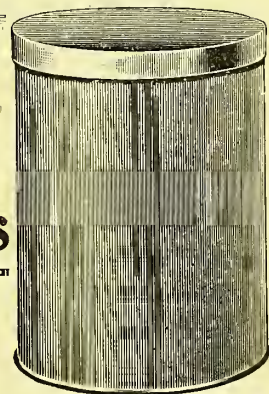
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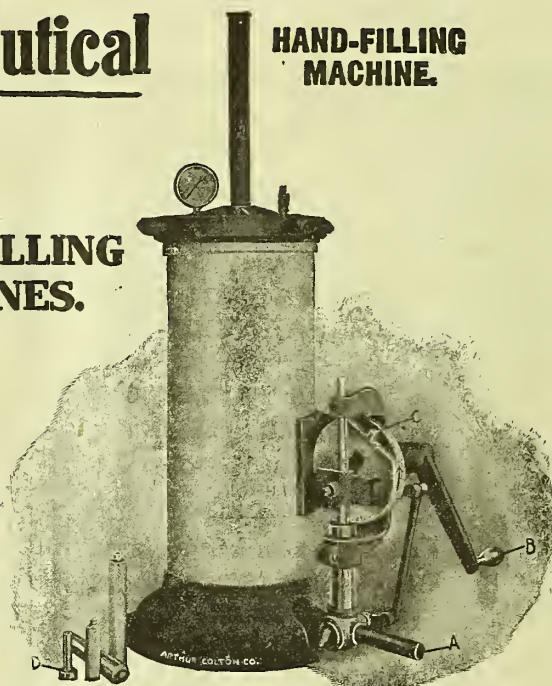
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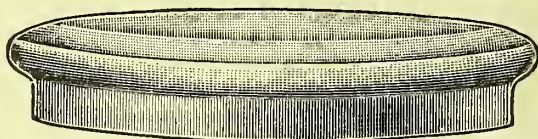
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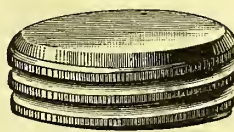
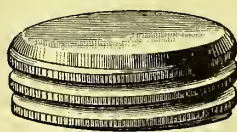
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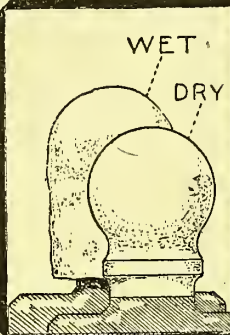


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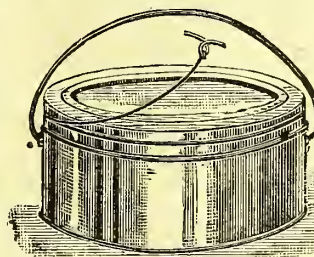
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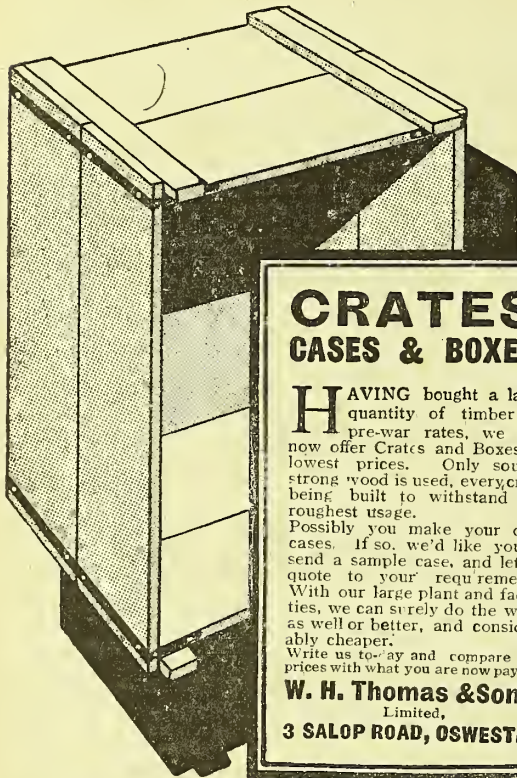
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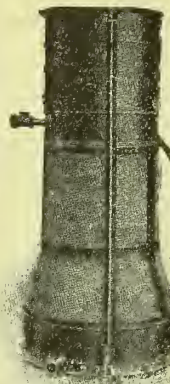
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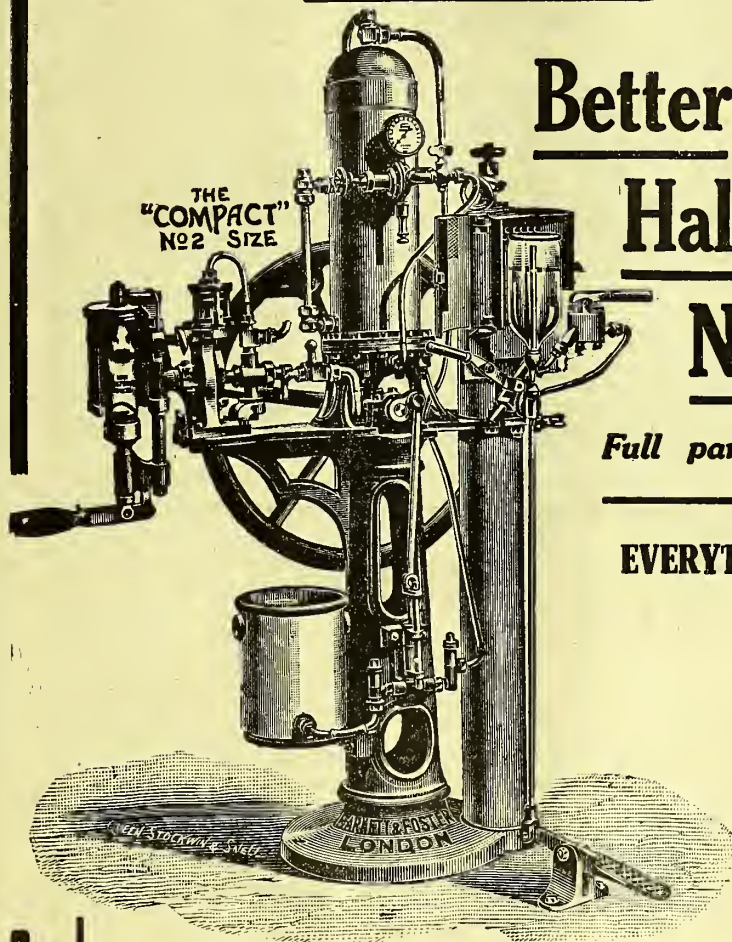
Shooks and Prepared Sawn Wood

Specialities:

LINDERMAN JOINTED SHOOKS.

CHEAP, NON-RETURNABLE, COLLAPSIBLE CASES FOR HOME TRADE.

Fill your Syphons at 120 lbs. Pressure



Better Waters

Half Usual Cost

No Breakage

Full particulars on application.

EVERYTHING FOR BOTTLING.

We supply every machine, article and appliance needed for the manufacture of aerated waters. Our lists, including the "Red Club" monthly price list of Soluble and Fruit Essences, Essential Oils, Mineral Water Salts, Colourings, Chemicals, and Drugs, posted free anywhere.

We are also makers of the "London" Syphons, and can supply from Stock.

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ENGINEERS

(Proprietors of GALLOWAY BROTHERS),

(Dept. N 2) Niagara Works, London, N. 1.

And at BOLTON, LANCS.

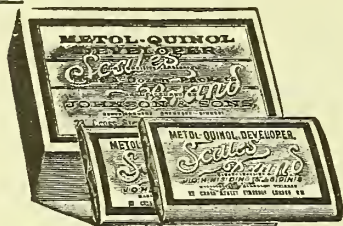
Telegrams: "Drinks London."

" Soda Bolton."

Telephones: London: North 1605.

Bolton 545.

No. 265.



Johnson's Packets

M-Q METOL-QUINOL

For developing Plates, Films & Papers.

Johnsons' are the manufacturers of pure Metol and are thus able to use the pure chemical in all their packets. Each packet is guaranteed to contain pure Metol. No substitute can equal the pure chemical.

Price List of "Scales Brand" Photographic Chemicals post free on Application.

JOHNSON & SONS MANUFACTURING
CHEMISTS, LTD.
Cross Street, Finsbury, LONDON, E.C.2.

To Chemists & : Drug Stores :

WE are real Chemists' Printers — we have one department for that work alone. :: We have everything you want or require.



Write us—we are at your service and will serve you well.

Thomas Waide & Sons
Darlington Street, Leeds.

Samples to Colonies 10/6 (full set), which amount we credit for the first order of £10 and upwards.

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(No. 633 MILL)

English Filter Papers

White and
Grey.
Plain,
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All sizes in
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**Several new Grades are now
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The Brand "Ingrams London" is a Guarantee of Quality.

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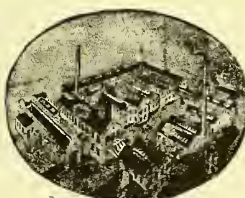
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TWO SIZES ONLY.

**DR. J. COLLIS BROWNE'S
CHLORODYNE****Prices and Terms :****TRADE :**

Minimum Retail Price	...	...	1/3	3/-
Price (<i>per dozen</i>)	...	...	12/3	30/6

Discount 5 per cent. on £1 worth, 7½ per cent. on £5 worth and upwards.

Packages charged at cost, and are not returnable.
Carriage forward.

Terms : Cash with order. Most Wholesale Houses supply on equal terms, so please order with your other goods.

Dr. J. Collis Browne's**Chlorodyne**

is on P.A.T.A. Protected List, & must not
be sold below the prices named above.

J. T. DAVENPORT, Ltd., Proprietors,
117 Union Street, S.E. 1.

Quite Time, Too!

Did we hear you say? WE AGREE.

Well! They're there now, locked, barred and bolted, and we want your co-operation.

For 84 years past, in all parts of the world, the name of Leath & Ross has stood for all that is BEST in Homœopathic Medicines. BUT—and it is a big BUT—for several years they have had one great fault from the point of view of the Retailer, and it has been a very reasonable point of view—they did not show sufficient profit. That is now remedied. The firm of Leath & Ross has been reconstructed, and the present Directorate desire that a Reasonable Profit shall be secured to the Retailer. Tinctures, Pilules, and all Proprieties such as "Neuraline," "Glykaline," &c., are placed on the P.A.T.A. Proprieties at face value.

New Prices for Tinctures and Pilules: 1/- size, 4/6 per dozen, less 10 per cent. for monthly settlement—minimum retail, 7½d. Smaller size discontinued.

OBTAINABLE FROM ALL WHOLESALE HOUSES, OR DIRECT FROM

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NEW ADDRESS: 295 High Road, Brondesbury - LONDON, N.W. 6.

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CHEMICAL WORKS,
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Salol

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{ Calcium (pure),
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Sodium (Solution 75 %), Iron,
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British Empire and Europe

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F.W. BERK & CO., Ltd.
1 Fenchurch Avenue, E.C. 3

THE CHEMIST & DRUGGIST SUPPLEMENT.

OFFICE: 42 CANNON STREET, E.C.

SATURDAY, JUNE 14, 1919.

EARLIER CLOSING FOR PRESS.

WILL intending Advertisers please note that until further notice all Advertisements for THE CHEMIST AND DRUGGIST SUPPLEMENT must be in the Publisher's hands not later than

FIRST POST THURSDAY MORNING,

to be available for the issue published in that particular week. Owing to restricted postal deliveries it is advisable to post all communications on the Tuesday preceding the date of issue. Advertisements received after the time indicated will be inserted in the following week's issue.

The Chemist and Druggist Supplement Advertisement Tariff.

Businesses Wanted and for Disposal, Premises to Let, Goods and Shopfittings for Sale, and Agencies: 4/6 for 50 words, every additional 10 words or less, 6d.

SITUATIONS OPEN: 4/6 for 50 words; every additional 10 words or less, 6d.

SITUATIONS WANTED: 1/- for 12 words; every additional 10 words or less, 6d.

Legal Notices, Tenders, Auctions, and all specially spaced announcements, 9d. per line (average line=10 words).

Miscellaneous (Wholesalers') Section, for odd and second-hand lots; 7/- for 60 words; 6d. for every additional 10 words or less.

EXCHANGE COLUMN (for Retailers, etc.). **One penny per word;** minimum one shilling.

BOX NUMBER.

In each case replies may be addressed to a registered number or non-de-plume, c/o this Office, at a charge of 6d extra for each advertisement.

PAYMENT.

All advertisements are prepaid, so that remittance must accompany instructions in each case. If it be necessary to telephone or telegraph an urgent announcement this may be done, provided the money is telegraphed at the same time.

THE CHEMIST AND DRUGGIST, 42 Cannon Street, LONDON, E.C. 4.

Telephone: Central 3617 (3 lines).

Telegrams: "Chemicus, Cannon, London" (2 words).

CHEMISTS' TRANSFERS.

Messrs. ORRIDGE & CO., 56 Ludgate Hill, E.C.

Telephone Number: City 2283

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

1.—KENT (Suburban).—Dispensing and Retail Business; corner position in main thoroughfare; returns exceed £3,000; net profit between £850 and £900; large shop and comfortable residence; price about £900.

2.—LONDON (Northern Suburb).—Good middle-class Business, chiefly ready money; returns upwards of £2,000 at good prices; well-appointed shop and comfortable residence; vendor's own property; price about £1,000.

3.—HYDE PARK.—For immediate disposal, high-class Retail and Dispensing Business; returns upwards of £1,200; gross profit between £650 and £700; the business is known to us, and we can recommend it; valuation terms.

4.—BAKER STREET STATION (10 Minutes from).—Dispensing and Retail Business; vendor retiring; returns between £2,000 and £3,000; net profit over £700; well-appointed shop and large residence; new lease; price £1,500, or valuation terms.

5.—HORNSEY.—Brisk Retail Business; returns, present rate, over £2,000 at good prices; well-appointed shop and comfortable residence; vendor's own property; price £1,400.

6.—FINSBURY PARK (Near).—Ready-money Business; returns, present rate, £2,000; net profit 25 per cent.; rent £60; new lease; price £850.

7.—SOUTH KENSINGTON.—Very old-established Business; present hands 50 years, now retiring; returns £1,500; present rate; scope for development under energetic management; price £600.

8.—POPULAR HEALTH RESORT.—Good-class Retail and Dispensing Business; returns exceed £3,000; convenient residence;

held on lease; further details on application; banker's reference will facilitate business.

9.—MIDLANDS (Large Manufacturing Town).—Old-established Business; Retail and Wholesale in packed goods; gross receipts exceed £8,000, and during the past three years the average gross profit amounted to £2,031; the premises are held on long lease at a rental of £60; price about £3,000; a banker's reference will facilitate business.

10.—STAFFS.—Ready-money Retail, with N.H.I. Dispensing; established many years; returns last year £2,456; full investigation invited; rent £30; offer wanted.

11.—HOME COUNTY.—Unopposed Business, comprising good-class Family trade, with general country Retail; returns average £1,200 per annum; net profit approximately £300; comfortable residence; rent £40; held on lease; price £600.

12.—WESTERN COUNTY.—Good-class Business for disposal through death; returns between £1,200 and £1,300, with scope for extension; well-fitted shop and large residence; rent £55; for an immediate sale less than the value of stock and fixtures will be accepted.

13.—KENT (Suburban).—Middle-class Retail and Dispensing Business; no N.H.I.; returns £900; net profit £249; comfortable residence; moderate rental; price £450.

14.—LONDON, W.—General Retail, with some Dispensing and considerable Photographic; no N.H.I.; returns show a steady increase, last year's turnover being between £1,350 and £1,400; gross profit 42½ per cent.; lock-up shop; no immediate opposition; good scope for increase; also Dentistry or Optics; terms £100 and valuation of stock and fixtures.

VALUATIONS FOR STOCKTAKING.

Messrs. O. & Co. desire to emphasise the necessity of a Periodical Statement of Account, by which means alone Profit the valued Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted, and eventually becomes the cause of confusion and loss. The Office will make special Terms for such services.

BERDOE & FISH

VALUERS & TRANSFER AGENTS

315 Newbury Street, Fenchurch Street, E.C.3

Telephone: 1808 CENTRAL.

CHARGE TO PURCHASERS

1.—NORFOLK.—Old-established Family Retail and Agricultural Business; in good market town; returns £2,350; large house and premises; own property; same hands many years, retiring; price about £1,500.

2.—MIDLANDS.—Good-class Retail and Dispensing in large important town; central position; returns over £3,000; can easily be made do £5,000, handsome Pharmacy; fully stocked; price £1,550; part can remain.

3.—SURREY.—Unopposed Light Retail, pleasantly situated 20 miles out; returns about £1,650; good house and garden; well stocked; books kept; price £775, or valuation terms arranged.

4.—BIRMINGHAM.—Working-class Cash Retail; returns average £40 weekly; good profits; plenty of scope; low rent; price for quick sale only £500 cash.

5.—MIDDLESEX (Northern Suburb).—Middle-class Cash Retail, with Gilbey's agency; returns £1,300; scope for increase; low rent; house attached; good stock; owner retiring; price £500; personally inspected and recommended.

6.—SOUTH LONDON (Close to City).—Brisk Cash Business for Disposal; returns nearly £40 a week; good profits; splendid corner position in busy main road; fully stocked; good modern premises; price £300, and stock at valuation.

7.—LONDON, S.E. (10 Miles Out).—Cash Retail and Prescribing Business; returns £1,000; net profit £290; moderate rent; on long lease; price £375; full value offered.

8.—LONDON, N.—Light Family Retail and Dispensing, with good Optical connection; returns £1,400, increasing; net profit about £400; well fitted and stocked; small house; price £750, or near offer; recommended.

BUSINESSES WANTED.

We are in immediate want of sound concerns, returning up to £3,000, in town or country, especially South Coast, Midlands, and North; cash buyers waiting. Intending vendors are cordially invited to correspond. Terms sent on application. Established 1870.

FOR SALE.

4s. 6d. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of 6d.

FOR Sale. 250 square soldered Tins, top 11½ in. square, depth 12½ in., ¾ in. lever lid in corner, wire handle on top; strong, clean, good condition; what offers? Foster-McClellan Co., 8 Wells Street, Oxford Street, London, W.1.

SACCHARIN Tablets, ½ grain, "Gem" brand, 10 1-lb. boxes (approx. 7,000), 32s. per lb.; 5 lb. at 30s.; cash with order; carriage paid. Howard & Co., 9 Wordsworth Road, West Bridgford, Notts.

SODA Water Fountain for Sale, complete with reducing valve and pressure gauge, germ filler, etc. Apply 199/17, Office of this Paper.

SURPLUS STOCK; 1 lb. English Mitcham Lavender Oil (1905); 56 lb. Spermaceti. John Hamilton & Co., 8 Springfield Quay, Glasgow.

TWO 2-oz. Liq. Adren. Hcl., 5s. each; Atropin Sulph. 3j. 12s. 6d.; Sod. Iodid., 1 lb., 12s. 6d.; 2,500 Tab. Hyd Perchlor., gr. 8.75, 10s. per 1,000; 100 Tab. Hyd. Biniod., gr. 8.75, 3s.; Novocain 3j., 6s. 6d.; 1 each 10 yd. x 3 in. and 4 in. Plaster, 5s. 6d. the two. "J.", 189 Wandsworth Road, S.W. 8.

WILKINSON'S Speedy Ointment Mill for power; useful for manufacturing either Ointments or Tooth Pastes; price £60 Curson, Gerrard & Co., Ltd., Oldbury.

PREMISES WANTED.

REQUIRED (shortly) a small Factory in or near South London, suitable for Wholesale Manufacturing Druggists. Full particulars to 200/900, Office of this Paper.

R. PENROSE KERNICK, A.C.I.S.

Surgeon's & Chemist's Valuer,
TRANSFER AGENCY,

QUEEN STREET - CARDIFF.

SPECIAL TERMS FOR STOCKTAKING.
ESTABLISHED 1885.

BUSINESSES WANTED.

4s. 6d. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

LIVERPOOL or SUBURB.—Pharmacist, demobilised, requires Business; preferably Light Retail and Photographic; returns £2,000 (about); must bear strict investigation; principals only Particulars in confidence to "Merseyside" (199/8), Office of this Paper.

LONDON.—Two Pharmacist partners are open to consider purchase of business in a main road, market place, or busy thoroughfare, which offers good returns and scope for increase; particulars treated in strict confidence. Apply 200/39, Office of this Paper.

SOUTH country, preferably Dorsetshire, Business required, or Managership, with view to succeeding. Replies, in confidence, 202/19, Office of this Paper.

SOUTH or SOUTH-WEST COUNTIES.—Pharmacist desires to purchase Business in healthy locality; returns about £1,000 or somewhat under; N.H.I. not objected to; must have good house accommodation attached; replies in strict confidence; cash available. Particulars to W. J. V. Fowden, 65 Abbey Road, Torquay.

BUSINESS required in town or good district (Swansea preferred but not essential); neglected one not objected to if position right; cash about £400, or larger one entertained if terms can be suitably arranged; full particulars of business, locality, competition, rent, rates, etc., will be treated as confidential. Apply 200/2, Office of this Paper.

BUSINESS required, with about £1,000 to £1,500 turnover; good house attached; state price for quick sale, or would manage with view to succession for a few weeks. Replies, treated in strictest confidence, "Xaxa" (202/29), Office of this Paper.

CHEMIST, with £200 in cash and £500 in stock, wishes to buy a small Business in good middle-class district; near London preferred, but not essential. Apply "X. Y. Z." (200/24), Office of this Paper.

DEMOLIBISED Soldier wishes to purchase Drug Stores on easy terms; good living accommodation essential; also scope for energetic man to improve the business, or would manage with view to purchase; replies with full particulars will be treated in strict confidence. Lewin, 7a The Gerstons, Paignton, Devon.

PHARMACIST wishes to purchase medium-class Business in the Midlands; near Birmingham preferred; must have living accommodation; would be willing to take over management with view to purchase; all communications will be treated in strict confidence. "Pharmacist," o/o W. R. Dunn, M.P.S., Horseley Fields, Wolverhampton.

PROPRIETARY Wanted.—Limited Company wish to purchase an established Proprietary Business, Medical or otherwise; good price will be given for one already stocked by Chemists, and capable of improvement by up-to-date methods. Apply 176/34, Office of this Paper.

SOUND Business wanted in Midlands or North-West, showing £450-£500 net profit; seaside or healthy suburb or small town preferred, but not essential; living accommodation necessary. Full particulars in strict confidence to "Lancashire" (202/38), Office of this Paper.

WANTED, a small Cash Business in a middle-class neighbourhood; price about £250-£300. "W. A. B.", Daisy Bank, John's Avenue, Hendon, N.W.

WANTED, a good-class Retail and Dispensing Business; must bear the strictest investigation. Kindly give full particulars, which will be treated in confidence, to "Spear" (200/32), Office of this Paper.

APPRENTICESHIPS.

4s. 6d. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

WANTED to Apprentice, gentlemanly youth, age 18, tall, six months' experience, in good-class business; time for study; any provincial town; Bath preferred, or S. Wales. Apply 200/31, Office of this Paper.

BUSINESSES FOR DISPOSAL.

4s. 6d. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

The **Advertiser** may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of **6d.**

BIRMINGHAM.—Old-established Light Family Retail and Prescribing, with good Proprietaries; populous industrial neighbourhood; immediate possession; good living accommodation or lock-up; low rent; lease; returns £1,000 yearly; practically under management; good opening for Dentistry and N.H.I.; satisfactory reason for disposal; practically unopposed; main thoroughfare; about £350. Pharmacist, Southall's, Bull Street, Birmingham.

EAST LANCASHIRE.—Busy manufacturing town; good sound Business, averaging over £30 weekly; Light Retail, Prescribing, and Dispensing; good profits; no cutting; no near opposition; will sell at valuation between £700 and £800; no Dentistry, Optics, or Photographic; low rent; cash deal only. Apply 199/20, Office of this Paper.

KING'S LYNN.—Old-established and well-connected Agricultural and General Retail Business for sale; returns last year over £2,000; well stocked, and good premises which may be purchased or leased. Apply Palmer, 373 High Street, Cheltenham.

LONDON, E.C.—Old-established Retail and Dispensing Business for immediate disposal; returns last year about £110 per month; expenses low; price £350; a bargain. "Syringe" (202/6), Office of this Paper.

LONDON, S.W.—A ready-money Business in medium-class district, doing £30 weekly and increasing, showing a net profit £500 a year; stands in good position to do more; price £600; books kept; investigation allowed. Apply 198/40, Office of this Paper.

LONDON, S.W.—Two Businesses for immediate disposal owing to ill-health; well fitted and fully stocked; returns £2,500; working-class trade with N.H.I.; low rents and good profits; terms, valuation and small premium. "Pharmacist," 22 Castlewood Road, Stamford Hill, N. 16.

A WILLING worker, with brains and £300, can obtain a Pharmacy in centre shopping district of West London (high-class neighbourhood) that will bring him in a good income almost at once, with great scope for increase; unique opportunity; very low expenses; good business much neglected. Apply 200/18, Office of this Paper.

LIGHT Retail and Dispensing (N.H.I. 5,000) in good Lancashire town; returns £1,500, increasing; well stocked; low rent; good reason for selling; price £600 net cash. Apply "Statin," c/o Evans Sons Lescher & Webb, Wholesale Druggists, Liverpool.

PROFITABLE Business in West Riding country town; handsome, well-fitted, modern shop; valuation and £100; cash only; owner entering larger business; pleasant house and garden also, if desired. Apply 190/31, Office of this Paper.

SMALL Light Retail in good district of N.E. Lancs town; especially good opening for Optics; established three years; present takings over £1,000; good living accommodation; premises on lease; a thoroughly sound business, which will well repay development; price, value of stock and fixtures and £50 premium (about £400); no inquiry replied to unless accompanied by reference. Apply 202/35, Office of this Paper.

TENDERS.**COUNTY BOROUGH OF SALFORD.****LADYWELL SANATORIUM.**

Tenders are invited by the 19th of June for the supply of **DRUGS AND MEDICAL AND SURGICAL APPLIANCES** required for the ensuing six months. Tender forms from the Medical Superintendent, Ladywell Sanatorium, Eccles New Road, Salford.

L. C. EVANS, Town Clerk.

AGENCIES.

4s. 6d. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

The **Advertiser** may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of **6d.**

Price-lists, trade circulars, samples, and printed matter can in no case be forwarded, the Box numbers being intended exclusively for specific answers to particular advertisements. The Publisher reserves the right to open and refuse to forward any communications received which he may consider contrary to this rule.

AGENT WANTED.

Swedish Wholesale Firm, dealing in crude drugs, fine and heavy chemicals, essential and fat oils, is looking for an Agent, familiar to the trade and able to attend to the interests principally for making purchases on commission.

Apply to N.P.A., 184/41, Office of this Paper.

SALES LIMITED,**34 Imperial Buildings, Ludgate Circus, London, E.C. 4**

Wish to bring to the notice of all Chemists and Druggists the products of the **ALLIED DRUG COMPANY OF CANADA**, whose specialities are Tooth Pastes, Shaving Creams, Cold Cream, Massage Cream, Night Creams, and Manicure Outfits, &c. &c.

Samples and full particulars sent on application.

POLAND AND SOUTH RUSSIA.—A French gentleman having been established 20 years in Petrograd for the sale of Patent Medicines and Wholesale Drugs, well-known by all Doctors and Wholesale houses, wishing to undertake a journey to Poland, Crimea, Caucasus, etc., desires Representation of first-class British firms. Pommier, 2 rue des Rosiers, Paris.

PORTUGAL.—Well-established firm at Lisbon with very good connection among dealers in Chemicals and Drug Products desires to Represent first-class houses manufacturing Ink Powders, Chemical Colours, and Chemical Products generally, for all industries; successful results guaranteed; good references. Address 17/15, Office of this Paper.

SOUTH AFRICA.—Dyes, Artificial Manures, Heavy Chemicals, Celluloid Manufactures, Brushes, Cotton Wool, Lint, Dressings, Scientific Instruments, special lines. If you want to be represented in any of the above by an active, keen, young man who knows the country and will sell the goods, write to C. Gordon Davies, 102 New Bond Street, W. 1.

AGENCY Wanted.—Traveller with wide connection amongst Chemists in Scotland, having just relinquished his connection with Medicinal Capsule Manufacturer, desires representation of other manufacturer on commission basis; excellent references. Apply 197/21, Office of this Paper.

CONTINENTAL Firm of Agents, with thorough knowledge and large Continental business experience, desires first-class Agency in Essential Oils, Synthetics, and Chemicals; agreement about the conditions; successful results guaranteed; good references. Address C. Noorman, 145 Rozengracht, Amsterdam.

EX-OFFICER Interpreter, qualified in Sciences at the Paris University, for ten years in heavy chemicals business, wants for France and Russia sole Agencies for first-class firms in England; advertiser would gladly visit interested people and is ready to travel. Write Lucien P. Leblanc, Ritz Hotel, Piccadilly, London.

SOLE Agencies of reliable manufacturers of Mining Chemicals, Drugs, Proprietary Medicines, Toilet requisites, for South Africa by well-established Wholesale Chemists, having London buying office; proposals stating terms and full particulars. Apply 195/11, Office of this Paper.

SOLE Agencies of reliable Manufacturers of Chemicals, Drugs, Patent Medicine, Perfumery and Toilet requisites are taken up on best terms for British India; proposals with particulars and samples immediately required. The International Commercial Agency, Limited, 147 Abdul Rehman Street, Bombay (established 1910; best references).

THE Anglo-French Drug Co., Ltd., desire to inform the trade that they have opened a Branch in Paris with large stock-rooms. They are therefore now in the position to offer their unique experience in introducing British goods and Specialities into France, and would be pleased to receive proposals as to sole Agencies. The Company would also act as Buyers in France or British and Colonial firms on a small commission basis. Proposals, etc., which will be treated confidentially, to be sent to the Head Office, Gamage Buildings, Holborn, London, E.C. 1.

PARTNERSHIPS.

ADVERTISER would like to meet with gentleman (Chemist or otherwise) who would invest about £600 in sound Retail Business for the purpose of taking over another business in same district; excellent security, and a sound proposition offered. Apply "Resorein" (202/33), Office of this Paper.

LADY, with full knowledge of Bookselling, Stationery, Library, etc., capital £300 to £400, wishes to meet with lady Dispenser with capital, to buy combined business; near London or South of England preferred. Apply 201/10, Office of this Paper.

MANUFACTURING Chemist with modern Pharmaceutical experience, capable of managing laboratory and staff, wishes to correspond with firm desiring a Working Partner where his abilities could be utilised and a financial interest obtained. Apply 199/34, Office of this Paper.

PARTNER wanted in good-class Dispensing and Light Retail business; excellent opportunity for young qualified Chemist with capital. Apply 202/36, Office of this Paper.

PHARMACEUTICAL Chemist (lady) demobilised; experience chiefly Hospital, but would be willing to act as Assistant or Manager to a Chemist, or would invest capital with a view to Partnership with a lady or gentleman with Retail experience. Write "Ph.C.," 8 Dagmar Road, Stroud Green, London, N.

SITUATIONS OPEN.

4s. 6d. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

The **Advertiser** may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of 6d.

RETAIL.

ANGLESEY (LLANGFNFI).—Manager for good Agricultural Business required at once; must be Welsh-speaking (no others need apply), qualified, and good Salesman. Apply, with full particulars, age, experience, salary required, and photo, to R. R. Jones, Pharmacist, Amlwch, N. Wales.

BRISTOL.—Assistant (middle-aged preferred), qualified or unqualified, with good Dispensing and Counter experience. Please state full particulars to "B." (202/34), Office of this Paper.

CAMBRIDGE.—Wanted, an Assistant for good-class Dispensing business. Apply, stating salary required and full particulars, to S. F. Barker, 46 Chesterton Road, Cambridge.

CHORLEY, LANCS.—Qualified Manager wanted for Light Retail business; permanency; full particulars in first letter. E. Staley, M.P.S., 17 Market Street, Chorley.

CHESTER.—Qualified Assistant required (married) for high-class Retail and Dispensing business; house and furniture (over Pharmacy); rent free; send full particulars of experience, age, height, and salary. Apply to W. F. J. Shephard, Davies & Shephard, Chemists, Bridge Street Row, Chester.

COWES, I.W.—Wanted, qualified (young) or unqualified; quick Retail and Dispensing. References, salary, etc., to Beken & Son.

DONCASTER ROYAL INFIRMARY AND DISPENSARY.—Wanted (at once), fully qualified Dispenser, of either sex; one who can Develop X-Ray Photographs and has experience in the purchase of Drugs and Dressings preferred; salary £150 to £200 a year, according to experience. Apply, stating qualifications fully, to Hon. Secretary.

EASTBOURNE.—Part-time engagement of from 20 to 40 hours per week, according to arrangement, principally for Dispensing, from about beginning of July to end of September; remuneration at the rate of 1s. 6d. per hour; applicant must be thoroughly capable. Full particulars, etc., to Moss, Chemist, Eastbourne.

HANTS.—Qualified Branch Manager; market town, Fareham; Prescribing, Photography, some Optics and Dentistry useful, not essential; good-class shop and business; large modern house; electric light; salary plus good commission, thus deriving benefit of energy and successful management. State full particulars, experience, age, salary, photo, references, married, when at liberty, Foster, "Ivydale," London Road, Portsmouth.

HERNE BAY.—Assistant wanted (at once) for season; Dispensing and Photography. Bayley, Chemist, Herne Bay.

GRIMSBY.—Qualified Assistant, capable of taking charge; state full particulars as to experience, age, salary required. Moores (Chemists), Ltd., Freeman Street, Grimsby.

LONDON.—Qualified Manager, married, for quick Store business in a busy thoroughfare near the Elephant and Castle; liberal interest in the profits offered to an energetic, capable man. "S. E." (197/183), Office of this Paper.

LONDON.—Qualified Manager resident in London required for relief work in the London district; satisfactory permanency eventually; the position offers excellent prospects. "Relief" (197/180), Office of this Paper.

LONDON.—Qualified Manager (outdoors) wanted for Suburban Business, North side; no Sunday or Bank Holiday duty; elderly gentleman entertained if active and energetic. Please state age, experience, and salary required to "X." (201/2), Office of this Paper.

LONDON, N.W.—Competent lady, Minor qualification, wanted to Manage easily worked business; outdoors; hours 9 to 8; weekly half-holiday; no Sunday duty. Apply, stating experience, salary required, etc., to "K." (201/200), Office of this Paper.

LONDON, S.E.—Wanted, for first week in July, an unqualified Assistant (male); outdoors; permanency; must be a quick and accurate Dispenser and able to assist at Counter; two kept. Apply, stating age, experience, salary required, and when disengaged, 201/21, Office of this Paper.

LONDON, S.W.—Unqualified Assistant, accustomed to good-class Dispensing, Retail, and Photography. Apply, with full particulars, experience, age, salary (outdoors), etc., to Gray, 5 High Street, Barnes.

LONDON, S.W.—Wanted, good, unqualified Assistant, with Dispensing experience; up-to-date Countermaid, good Window-dresser and Salesman essential. State full particulars regarding experience and salary required in first letter, "H.," 4 Wilbury Avenue, Hove, Sussex.

LONDON, S.W.—Wanted (at once), capable Assistant, with good Dispensing and Counter experience; indoors; please state full particulars in first letter. Apply 201/33, Office of this Paper.

LONDON, W.—Qualified Dispenser wanted for large West-End establishment; easy hours; excellent experience. Apply in first instance to "L." (183/39), Office of this Paper.

LONDON, W.—Junior Assistant (male) required in good-class Dispensing and Retail business; must be a reliable Dispenser. Apply, with full particulars of experience, etc., and salary required, to G. W. Gray, 194 Holland Park Avenue, W. 11.

LONDON, W.C.—Cofman's Pharmacies have two vacancies: a qualified man as Manager and a Second Assistant as Counter-man; both must be capable, smart, well spoken, with good West-End experience. Apply, with reference and full particulars, Cofman's Pharmacy, 6 Bloomsbury Street, W.C. 1.

MANCHESTER.—Qualified Assistant; age 35 to 50. State full particulars, age, height, experience, references, salary required (outdoors), and when disengaged, to A. Jeans, 151 Oxford Road, Manchester.

MANCHESTER.—Qualified Assistant for Retail and Dispensing business; permanency; give full particulars, salary, experience, references. Apply 203/16, Office of this Paper.

MARGATE.—Wanted, a competent Assistant accustomed to brisk business; good-class Retail and Dispensing, with Photographics; June to September. Kindly state age, height, details of experience, and salary required (outdoors), to D. T. Evans, Chemist, Margate.

MARGATE.—Junior Assistant (outdoors) for season; good-class Retail and Dispensing; full particulars, photo if possible. W. M. Rosser, 2 Ethelbert Terrace, Margate.

MIDLANDS.—Qualified Manager required to undertake relief work for a time; if satisfactory permanent management will be offered on liberal terms. "Mid." (197/181), Office of this Paper.

NEAR CHESTER.—Unqualified Assistant; competent to take charge; easy hours; good wages; outdoors; state salary expected, age, and experience; the business is a good-class country one, with considerable turnover. Apply "X." (202/2), Office of this Paper.

NEAR MANCHESTER.—Wanted, Assistant, to commence duties September 1st; no Sunday duty, half-holiday; give full particulars and salary required. T. M. Cook, Chemist and Optician, Hindley.

NEAR MANCHESTER.—Wanted, qualified Assistant; either sex; Counter experience necessary. State age, experience, and salary required, 199/170, Office of this Paper.

NEAR MANCHESTER.—Qualified Assistant to take charge of branch; must be a good Salesman and Manager. Please state age, height, details of experience, and salary required, 199/171, Office of this Paper.

NEAR MANCHESTER.—Lady Assistant required for Retail and Dispensing business; previous Counter experience absolutely necessary. Address, stating age, experience, salary, etc., to 199/172, Office of this Paper.

NEWPORT, MON.—Capable, unqualified Assistant required for large progressive business; must have had good Dispensing experience; permanency with excellent prospects. Apply 197/18, Office of this Paper.

NORTHAMPTON.—Qualified man to Manage small business; an easy berth; would suit elderly or partially disabled man; no Sunday duty. Full particulars, salary required, etc., to 199/25, Office of this Paper.

NORTH WALES.—Wanted, a qualified Assistant; would suit elderly gentleman; duties very light, with easy hours; usual half-day holiday, and no Sunday duty. Apply, with particulars, to "Rhei" (201/38), Office of this Paper.

SOUTH WALES.—Wanted, a trustworthy qualified Manager for new Branch; must be good Prescriber and Salesman; Welsh speaking preferred; comfortable berth; good and progressive salary. Apply, giving usual particulars and enclose photo if convenient, to Melville Thomas, Chemist, The Square, Neath.

WALSALL.—Wanted, qualified Assistant (end of July); high-class trade; good salary to suitable man. Give full particulars in first letter to Haywards, Leicester Square, Walsall.

ASSISTANT; unqualified; good Counterman essential; reliable Dispenser; easy hours; good wages (outdoors); two others kept. Apply, giving full particulars as to age, experience, and salary required, to T. Bellamy, Pharmaceutical Chemist, Chelmsford.

ASSISTANT wanted for Dispensing and Counter; must be accustomed to good-class business; permanency. Full particulars and references in first letter, or apply personally, to H. Southall, Chemist, Walthamstow, Essex.

ASSISTANT Lecturer and Demonstrator required; Major qualification advisable. Please give full particulars, in first letter, to "Principal," The South of England College of Pharmacy, 186 Clapham Road, S.W. 9.

BARNES & MARSH, Putney, require a capable and trustworthy qualified Assistant (outdoors) by middle of July; must be accustomed to good-class Dispensing business. Apply, stating salary required and giving full particulars as to experience, etc., enclose photo if possible (to be returned).

BOOKKEEPER (male) wanted by West-End Chemist; spare time; one or two afternoons a week, or early evenings; permanency. Apply 200/13, Office of this Paper.

BRANCH Manager, South Coast town, for business to be opened shortly in middle-class residential district; excellent opportunity for energetic man prepared to accept a moderate salary and fair share of profits from the business he creates; lock-up shop; healthy, braising neighbourhood; every help will be given by Pharmacist Proprietor to make the enterprise successful; state experience, age, salary, when disengaged. "Co-operation" (203/1), Office of this Paper.

CHEMIST.—Qualified branch Manager required (at once); N.H.I.; close Tuesday 11.30, Saturday 6, 48-hour week, no Sunday duty. State full particulars, experience, age, salary, references, when at liberty, to Secretary, Morley Industrial Co-operative Society Limited, Morley, Yorks.

DISPENSER; Minor qualification; compounding of Pills not required; hours of work, approximately, 8.45 a.m. to 6.15 p.m., Saturdays 1 p.m. Apply, personally or by letter, stating experience and salary required, to Manager, Drug Dept., Army and Navy Stores, 105 Victoria Street, S.W. 1.

FOWKE & SON, Stafford, require a smart Assistant (male). Apply, giving full particulars, references, and salary required, and if possible photo.

GOOD unqualified Assistant wanted for the month of July. Apply Black, Chemist, Tredegar, Mon.

IMPROVER or young Junior.—An exceptional opportunity occurs for one just completed Apprenticeship to gain valuable experience in a good-class business; short hours, no Sunday or holiday duty; give full particulars, and enclose photo if possible. R. D. Silver, Chemist, Kettering.

IMPROVER or Junior; good-class family business South London suburb; Dispensing and Photographic; easy hours, comfortable berth (outdoors); state salary required. "A. C. E." (180/27), Office of this Paper.

INDOOR Assistant wanted (at once); state age, height, experience, salary required, give references. Apply to Milne, Chemist, Amesbury, Salisbury, Wilts.

JUNIOR or Improver in country town in West of England; (outdoors) but meals provided in business hours; no Sunday or Bank Holiday duty, usual weekly half-holiday, hours 8 a.m. till 7 p.m., Saturdays 9. Apply, stating salary required, enclosing photo (which will be returned), to 197/3, Office of this Paper.

JUNIOR or Improver for good-class Dispensing and Photographic; state age, salary (outdoors). Harrison, Grayshott, Hindhead, Surrey.

JUNIOR or Improver required for quick Retail Cash business; one with knowledge of Photography and good Window-dresser preferred. Apply, stating salary required (outdoors), to Gray, Chemist and Optician, 45 Longbridge Road, New Barking, Essex.

JUNIOR (unqualified) wanted (at once) for good-class business in healthy far-out London suburb; must be good Dispenser and well up in Photography; please give full particulars of past experience and state salary required (outdoors). Apply 201/4, Office of this Paper.

JUNIOR.—Reliable man wanted for Dispensing and Counter in good-class business; large country town. Full particulars and salary required (outdoors) to 202/24, Office of this Paper.

LADY, as qualified Manager for small Retail and Insurance Dispensing business near Manchester; state detailed particulars as to career, age, salary, and when at liberty. Apply 199/1, Office of this Paper.

LOCUM wanted for a fortnight from June 30th to July 12th in single-handed business. State terms and references with photo (if convenient) to Phillips, Chemist, Tadworth, Surrey.

LOCUM wanted, qualified, elderly, active, for about three weeks, beginning of July, reasonable terms, for country Business. Please state terms in first letter, photo, and usual particulars, to 199/31, Office of this Paper.

LOCUM wanted (about July 21st); capable Dispenser and good Counterman; references with first application; salary (indoors) £3 weekly; qualified preferred; hours 9 to 7; no Sunday duty or duty after 1 on Thursday. A. H. Evans, Chemist, Stamford Hill.

LOCUM required for three months commencing July 1st; please state terms first letter. Apply "L." (185/21), Office of this Paper.

LOCUM (gentleman or lady), qualified, for second fortnight in August; Junior kept; outdoors; state terms. Wm. Ralph, 19 Burnt Ash Hill, Lee, S.E. 12.

MESSRS. TIMOTHY WHITE CO., LTD., Chemists, Portsmouth, require a capable Pharmacist; easy hours; good and progressive salary, with excellent prospects; free removal.

QUALIFIED Manager for small business in Manchester district, including Retail and Insurance Dispensing; state full particulars as to career, age, salary, and when at liberty. Apply 199/100, Office of this Paper.

QUALIFIED Manager (single) required for relief work; Yorks and Lancs; good opening for young man anxious to make progress. "Y. L." (197/182), Office of this Paper.

QUALIFIED Assistant required for high-class Retail; good salary to progressive man with modern ideas; easy hours and little Dispensing; applicants must be good Salesmen. State experience, salary required, and enclose photo, to M. Rogers & Son, Ltd., 8 Darley Street, Bradford.

QUALIFIED Manager (at once); young; married; to live on premises; rent, rates, electric free; fixed salary, plus at least 20% on net profits; knowledge of Photography essential; good modern house; pleasant neighbourhood; splendid prospects for a good man; easy hours. Salary and full particulars to Fowler, Chemist, Gravesend.

QUALIFIED Manager for Branch; house provided if necessary. Apply, stating salary required and usual particulars, Exors. Joseph Price, 225 Great Cheetham Street, Higher Broughton, Manchester.

QUALIFIED Assistant, good address, for good-class Retail and Dispensing business. Apply with reference, etc., B. Salter & Son, Chemists, Shrewsbury.

QUALIFIED Assistant wanted for country business in Midlands; Light Retail and N.H.I.; short hours; no Sunday or Thursday duty; Extractor preferred, but not essential; permanency. "Rhei" (202/16), Office of this Paper.

QUALIFIED Help required (at once) in Essex; duties light; must have good references. Apply 202/22, Office of this Paper.

QUALIFIED Manager required for good middle-class business; S.W. district; N.H.I. Dispensing; state full particulars, references, salary, etc. "C." (203/19), Office of this Paper.

QUALIFIED Assistant; best-class Retail and Dispensing; outdoors; short hours; state age, experience, when disengaged, and salary required. Hairsinc & Co., 47 Haymarket, London, S.W. 1.

RELIABLE Assistant wanted; accustomed to first-class business. Apply personally, or write full particulars of experience, age, height, etc., to Mr. H. J. Perrett, 90 Victoria Street, S.W. 1.

REQUIRED, about middle of July, a Junior Assistant (one who has recently completed his apprenticeship preferred); outdoors. Apply, giving all particulars as to experience and salary required, enclosing photo if possible (to be returned), to Barnes & Marsh, Putney.

REQUIRED, qualified Assistant for old-established Light Retail and Dispensing business, with Optics and Photography. Apply, with full particulars, to A. P. Tiley, Pharmacist, Burslem, Stoke-on-Trent.

TEMPORARY Dispenser wanted; Hall certificate; lady; salary at rate of £100 a year, and £12 a year as War Bonus; dinner and tea when on duty. State age, etc., Medical Superintendent, Herts County Asylum, Hill End, St. Albans.

UNQUALIFIED Assistant wanted (at once) for season; knowledge of Photography. Apply, stating full particulars, age, salary required (outdoors), references, and photo, to Pearce, Chemist, Newquay, Cornwall.

UNQUALIFIED Assistant wanted, immediately, mostly for Counter work; photographic salesmanship essential. Atkins & Son, Pharmacists, Salisbury.

WANTED, a qualified man to Manage business for widow in healthy country village; suit elderly man or one disabled in war and requires a quiet life. Reply 199/24, Office of this Paper.

WANTED, a capable Junior Assistant (outdoors); no duty after closing at 7.30, and none on Sundays; usual half-holiday. Apply, stating age and experience, and enclose photo, to L. North, Bridge Street, Northampton.

WANTED (at once), for a good-class country business, a gentlemanly Assistant as Manager; age between 30 and 40; good Prescriber and Dispenser essential. Kindly state experience and salary required (preferably indoors) to Mrs. McKnight, Fleet, Hants.

WANTED (immediately), French-speaking Assistant; with West-End experience preferred. Apply the Manager, Hep-pell's, 78 Strand, W.C.

WANTED, qualified Manager; middle-class trade; outdoors; hours 9-7 Monday, Tuesday, and Wednesday, 1 p.m. Thursday, Friday 8, Saturday 9 p.m., no Sunday work; seaside town; would suit elderly man; easy position. Please state age, salary, etc., to "Edward" (201/25), Office of this Paper.

WANTED, Junior Assistant; used to Dispensing and good-class business, also putting up stock. Apply D. L. Evans, 32 Harrington Road, South Kensington.

WANTED, Dispenser (Minor) for Branch; state experience and salary required (outdoors). Apply 202/330, Office of this Paper.

YOUNG lady Assistant for Stock and Office work, etc.; easy hours; state salary required. Apply 198/4, Office of this Paper.

£250 (or lower salary and commission); we require a qualified Assistant; a real good Salesman, Window-Dresser, and with a knowledge of Photography; very little N.H.I.; full particulars in first letter please. Cole & Son, Weymouth.

WHOLESALE.

4s. 6d. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

The **Advertiser** may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of **6d.**

A N accurate, careful, and experienced Assistant for the fine chemical room is required by a leading Scottish house. References and particulars to 199/39, Office of this Paper.

CAPSULE Maker.—Girl wanted for hand-made Capsules. Apply, stating experience and wages required, 184/54, Office of this Paper.

CHEMIST, qualified preferred, for Wholesale provincial house; must be able to control staff, and be well up in the manufacture of Galenicals by up-to-date methods; knowledge of Compressed Tablet making essential; one desiring a permanency preferred. State age, experience, and salary expected, 201/24, Office of this Paper.

DIRECTOR required by an old-established London Drug House; qualified to act as Laboratory Manager; must be well up in modern methods of Manufacture and prepared to invest capital. Apply 200/9, Office of this Paper.

JUNIOR Clerk wanted in London Wholesale Patent Medicine House and Druggists' Sundries; used to Pricing and Invoicing. Also Query Clerk, experienced in settling claims for breakages and shortages. Apply "A. H." (200/8), Office of this Paper.

LABORATORY Assistant required by small London Wholesale Druggists; must be well up in the manufacture of Galenicals, able to control staff, and take charge when necessary. Tincture-Maker also required; state experience and wages. Apply 200/90, Office of this Paper.

MANUFACTURERS of Proprietary Articles require experienced and capable Traveller, with good connection in provinces among Chemists and Hairdressers. Write, full particulars, salary, etc., "L." (184/17), Office of this Paper.

MANUFACTURING Chemists require the services of an experienced, unqualified Assistant to take subordinate charge of Laboratory; an Assistant also required for the Dry Despatch Department. Applicants should in first instance state salary required, previous experience, and date they could take up appointment to "Chemico" (199/5), Office of this Paper.

PACKER wanted for Export Department. Baiss Brothers & Co., Ltd., 174-176 Grange Road, Bermoudsey, S.E. 1.

REPRESENTATIVE wanted by large firm to call on Chemists and Druggists with Toilet Requisites. Apply, stating age and experience, to 180/14, Office of this Paper.

REPRESENTATIVE, calling on Wholesale and large Retail Chemists and Druggists, wanted to take up as side line to his present connection the introduction of Soothers, Nipples, Rubber Teats, etc. Write, giving particulars, requirements as to commission, etc., to "L." (185/28), Office of this Paper.

SEVERAL smart Travellers wanted to carry good paying side line; 20 per cent. commission. Full particulars re ground covered (in confidence), 201/1, Office of this Paper.

STEAM Laboratory Manager or Foreman required shortly. State experience and full particulars in confidence to Managing Director, O. J. Hewlett & Son, Ltd., 35-42 Charlotte Street, E.C. 2.

SURGICAL Trade.—Smart Salesman for Surgical business, used to Counter work, in Birmingham. Apply, stating wages and experience, 181/67, Office of this Paper.

TABLET Maker.—Good all-round man wanted to take charge of small plant; progressive salary to a capable man. Give full particulars to Walton, Manufacturing Chemist, Batley.

TRAVELLERS wanted, on commission, with connection among Wholesale and Retail Chemists, for new Proprietary Article already taken up by leading Stores. Particulars, in confidence, to "Original," c/o Deacon's, Leadenhall Street, E.C. 3.

ANTED, smart Travellers with first-class connections for Scotland, Northumberland, Durham, Cumberland, Westmore-Midlands, Eastern Counties to push excellent, side-line; er cent. commission; a proved dry cleaner, not a dye; sell and 6d.; perfect results on the fashionable velour and pile hats and wide range of articles; smart showcards; small-les. State full particulars in confidence to 199/7, Office of Paper.

AREHOUSEMAN, with Dry and Wet Counter experience. Apply, stating salary required and previous experience, to Wilson, F.I.C., c/o Randall & Son, Ltd., 146 High Street, Hampton.

ANTED by Yorkshire firm of Wholesale Druggists, Representative for London, South and Eastern Counties; must good connection amongst Chemists, etc., to sell well-established line; 10,000 unsolicited testimonials received already; opportunity for energetic and order-getting Salesman; £5, and commission and expenses; guarantee Society bond red. Address, with full particulars, to 203/18, Office of this

ET Counterman wanted in country town; quick worker; permanency; good wages; removal free. Please state age, experience, etc., 203/10, Office of this Paper.

SITUATIONS OPEN.

d. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

(Colonial, Indian and Foreign.)

NGKOK, SIAM.—Qualified Assistant required; knowledge of sight testing and fitting essential; one with good-class London experience preferred; four years' agreement; salary £400, £425, £500 yearly, with furnished quarters; passage paid out home. Apply, with testimonials and photograph, to "M. H.," Department, S. Maw, Son & Sons, Ltd., 7-12 Aldersgate E.C. 1.

ERATED MALAY STATES.—Qualified Assistant; unmarried; must have had good experience in retail; terms years' agreement; salary 350, 400, 450 pounds sterling annum; passage paid second class out and home; short hours; climate; the firm one of the largest in the East; and the in and surrounding country most attractive. Apply Dakin & Sons, Ltd., 82 Middlesex Street, E. 1.

NG KONG.—Two thoroughly reliable Assistants, who have had good experience in first-class Retail business; age 22, four or five years' agreement; salary for qualified men rising to £510 or £520 per annum; special terms for men exceptional ability; passage paid out and home. Address "Port" (200/26), Office of this Paper.

AN.—Two qualified Assistants wanted for old-established European Pharmacy in Yokohama; free furnished quarters, lighting and heating; second-class passage out and home; years' agreement. Apply, with testimonials and photo, to "E.," Export Dept., S. Maw & Sons, Ltd., 7-12 Aldersgate E.O. 1.

IS.—Assistant required with knowledge of Photography. Apply, giving full particulars, Fleury, Darrasse Frères, 8 Pavée, Paris.

APORE.—Wanted (immediately), qualified Assistant; unmarried; three years' agreement; passage paid out and home; first year £35 monthly, second year £37 10s., third year healthy climate; desirable situation. Full particulars from Watt, Chemist, 28 Esslemont Avenue, Aberdeen.

ITS SETTLEMENTS.—Qualified Assistant, young, and capable of managing Branch Dispensary; four years' agreement; passage paid out and home; salary first year, £30 per second and third years £32 per month, fourth year £35; opportunity for an energetic man; a knowledge of Optical Photography work desirable. Apply W. C. H., Burgoyne, & Co., Ltd., East Ham, E. 6.

ire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents or assistants, or wish to sell their businesses, an advertisement in this Supplement, placed every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and references can be sent to us direct or through the advertisers' correspondents in this country.

SITUATIONS WANTED.

1s. for 12 words or less; 6d. for every additional 10 words or less, prepaid.

The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of 6d.

[HOME.]

RETAIL.

ADVERTISER requires a post as Second Assistant; 21; excellent references; accustomed to high-class business. Apply 199/29, Office of this Paper.

AS Locum; wide Provincial and London experience; highest credentials; well recommended; August, September. "Beta," c/o 74 West Hill, East Putney, S.W. 15.

AS MANAGER or Locum; Minor; tall, active; thoroughly experienced Dispensing, Retail and Store trade. "Veritas," 21 Formosa Street, Maida Vale, W.

ASSISTANT; 24; good Dispenser; energetic; exceptionally smart and tactful Counterman; disengaged. Arnott, Boot Stores, Aberfan, Glam.

ASSISTANT or Manager; unqualified; 28; experienced Dispensing, Counter, Window, etc.; excellent references; Lancashire or Cheshire preferred. Apply 194/22, Office of this Paper.

ASSISTANT, 8 years' experience, unqualified, age 24, smart appearance, tall, requires post; Yorks, Notts, or Lines preferred. Apply 203/9, Office of this Paper.

ASSISTANT, 30, good appearance, keen Salesman, desires post as First Counterman or in Showroom; W. or S.W. London; highest references. Replies 202/26, Office of this Paper.

ASSISTANT; Dispenser, Counterman; good appearance; well recommended; tall; finished Service. "Statim," The Brick Works, Colwich, near Stafford.

ASSISTANT (24), unqualified, requires situation in Nelson or Burnley district, or Locum work. R. S., 7 Keighley Road, Colne.

BRANCH Manager, or other capacity; middle-aged, active. Rees, 8 Salisbury Road, Brislington, Bristol.

BLACKPOOL District.—Experienced Assistant (unqualified) desires permanency. Oliver, 2 Christian Road, Preston.

CHEMIST in large town near Norfolk Broads wishes exchange duties with country Chemist for holiday; very light duties both sides. Apply 203/13, Office of this Paper.

CHEMIST'S Assistant, unqualified, good Dispensing and Counter experience, knowledge of Photography, seeks permanent berth first week in July. Apply 198/32, Office of this Paper.

DEMOBILISED Dispenser and Surgery Attendant seeks post with Doctor; 10 years' experience; 32, single; excellent references; state salary; Locum or permanency. Apply 199/3, Office of this Paper.

DEMOBILISED; 32, married; 2½ years Dispenser Military Hospital; 16 years' experience Retail, Photography, Dispensing; permanency, or would undertake Locum work in Midlands for a few weeks. "Pharmacist," 6 Welbeck Street, Creswell, Mansfield.

DEMOBILISED, 35, qualified, desires Managership, with idea easy purchase; S.W. or South England. J., 8 Bridge Avenue, Hammersmith.

DISENGAGED July 1st and August; Locum; good references; London, provincial experience; state terms. "Chemist" (200/37), Office of this Paper.

DISPENSER.—Young lady (19), unqualified, desires a post in a good-class Chemist's or Hospital. Laing, "Strathtay," Monkham Lane, Woodford, Essex.

DISPENSER (lady), Apothecaries' Hall, experienced, reliable, requires post; London or suburbs; disengaged. "A. S.," 49 Weymouth Street, W.

DISPENSER (lady) desires post; two years' experience. Clarke, 60 Queen's Road, Teddington.

DISPENSER.—Unqualified young lady seeks appointment, afternoons and evenings; N. or N.W. London district preferred. Write M. D., c/o 253 Finchley Road, N.W. 3.

DISPENSER (Doctor's); unqualified; experienced; disengaged; state terms. "Dispenser," 19 Wards End, Loughborough, Leicestershire.

DISPENSER, Bookkeeper, etc.; twenty years' experience; age 40; disengaged; permanency required; would do Locum; married. Strutt, 2 London Road, Hailsham.

DISPENSER; unqualified; eighteen years' experience; *qualified in America*; Prescribing specialist; Bookkeeping, Typewriting; whole or part time; Indian. "Tuga," 61 Cirencester Street, Paddington, W. 2.

DISPENSING.—A lady (Hall qualification) seeks post; Institution or with Doctors; near sea preferred; two years' experience London pharmacy. "A," 2 Stanhope Gardens, Ilford, Essex.

EVENINGS, Saturdays, etc.; Stock, Dispensing, etc.; reliable. Newman, c/o 74 High Street, Camden Town.

EXPERIENCED Manager, unqualified, married, age 42, desires permanent berth; Extractor; good references. Apply "Rhei" (199/10), Office of this Paper.

EXPERIENCED lady Dispenser desires re-engagement; Locum or permanency. Apply 202/32, Office of this Paper.

GENTLEMAN, 41, as Managing Assistant, Counterman, or Dispenser; highest references; West-End experience. State hours and salary to "James" (198/38), Office of this Paper.

HARROGATE or District.—Advertiser, 31, married, unqualified, abstainer, seeks post Wholesale or Retail; nine years' Wholesale abroad; highest references; state salary. "Harrogate" (190/18), Office of this Paper.

IMMEDIATELY required a post as Second Assistant; 21; Dispenser, Counter, Photography; please state salary, etc. Apply 194/34, Office of this Paper.

JUNIOR; Continental experience; fluent French; Dispensing and Counter; indoor preferred. Apply 200/14, Office of this Paper.

JUNIOR (19) requires situation; London preferred. Jones, Glancieri, Cross Hands, Carmarthen.

JUNIOR; 3 years' pre-war experience; aged 22; tall, good appearance; temporary post till end of September. Apply 201/7, Office of this Paper.

LADY Dispenser (Hall cert.) requires post with Chemist, Doctor, or Institution; four years' experience; good testimonials; Liverpool preferred. Apply 199/19, Office of this Paper.

LADY Dispenser, Hall (23), seeks post with Doctor; country town or seaside; permanent or Locum; Books; experienced and careful Dispenser. Apply 198/30, Office of this Paper.

LADY Dispenser; 21; Hall qualification; disengaged; London preferred. Thomas, Maxwell House, Clifton Gardens, Maida Vale, W. 9.

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